The American Artisan
And Hardware Record

Vol. 56. No. 6. CHICAGO, AUGUST 8, 1908. $2.00 Per Year.

All Kinds of
BOLTS, RIVETS, NUTS, WASHERS, CARRIAGE FORGINGS, ETC.
Send for 1908 Catalog "B" Prices on Application
COLUMBUS BOLT WORKS
COLUMBUS, OHIO

GET THE LIVE LINE
"AMERICAN SEAL"
Elastic Oil Roofing Cement, Stove Putty and Asbestos Furnace Cement
For Furnaces, Stoves, Ranges and Roofs.
Jobbers write to-day for prices
THE
Wm. Connors Paint Mfg. Co.
Makers. TROY, N. Y.
Western Agents: Friedley-Voshardt Co., 194 Mather St., Chicago, Ill.
Southwestern Agents: Stockhoff Supply Co., 107 N. Main St., St. Louis, Mo.

Trying to do business without advertising is like winking at a girl in the dark: you know what you are doing but nobody else does.

MATCHLESS
Spring and Pivot Hinges
Floor Hinges, Jamb Hinges and Hardware Specialties.
The fact that Matchless Spring Hinges have been on the market since 1895 and that in that time not one set has required repairs from fault of hinge speaks very well for their serviceability and wearing qualities.
If your Jobber cannot furnish them write us.
LAWSON MFG. CO.
40 Dearborn St., Chicago, Ill.

NEW DESIGN WORLD'S BEST
TUBULAR TRACK DOOR HANGER

We have increased the diameter of the wheel to 2¼ in., making it the easiest running Hanger on the market.
The supplementary wheel prevents derailment. Frame is made of the best grade malleable iron. Finished in Aluminum and each pair packed in an individual box, complete with bolts. The track brackets are slidable and may be placed at any point desired. We do not sell catalog houses. Write for prices.
SAFETY DOOR HANGER CO.
Manufacturers
Ashland, Ohio Hamilton, Ont., Can.

"NEVER-BREAK"
TRADE MARK

Catalog Free
"NEVER-BREAK"
STEEL SPIDERS, GRIDDLES AND KETTLES
WILL NOT Scale Off like cheap enamel.
WILL NOT Scorch or Burn like light fry pans and skillets.
WILL NOT Absorb Grease or Flavors like cast-iron.
THE AVERY STAMPING CO.
CLEVELAND, OHIO
Sole Manufacturers "NEVER-BREAK" Goods.

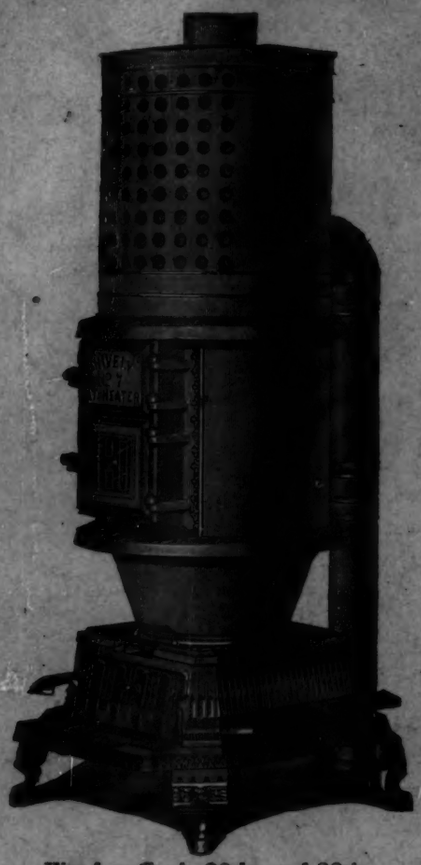
DELTA
FILES OF QUALITY
CARVER FILE CO., Philadelphia, Pa.
An independent organization not connected with the trust in any form, shape or manner.
To keep up the sales, keep up the quality.
TRADE MARK DELTA
FILES

PULLMAN SASH BALANCES

Are you selling them?
IN USE EVERYWHERE
Send us your orders
PULLMAN MFG. COMPANY
SOPHIA STREET
ROCHESTER, N. Y., U. S. A.

HONES ARE HONES
But "APART" Hones are the Thing

For Sale by all Jobbers
S. R. DROESCHER
79 Warren St. NEW YORK, N. Y.



Wood or Coal—20 In. and 22 In. Fire Pot.
Several Hundred in Use.

NOW IS THE TIME

To Sell Your School Board the Only Successful Stove Made for Heating and Ventilating One-Room School Houses.

Our Catalogue and Price List Are All You Need.

The Man Who Invented and Patented THE SHIVELY PURE AIR STOVE Received His Early Education in a "Cross Road" School House.

¶ He remembered the cold floor—the frosted windows, and that the scholars near the stove were suffering from heat, while those seated on the side aisles were suffering from cold.

¶ His Invention Overcomes the Trouble.

¶ The Shively Pure Air Stove draws the cold air from the floor and replaces it with warm air. In addition to this, it maintains a strong and constant circulation from and to every part of the room maintaining nearly an even temperature at every point.

¶ This stove may be easily connected to draw air from out-of-doors, heating it to the proper temperature and diffusing it through the room in a constant flowing stream.

¶ One of these stoves will increase the average attendance and scholarship of almost any rural school.

¶ They are easily sold to School Boards. They pay a good profit—Do you want it?

Stove & Range Co. of Pittsburgh
PITTSBURGH, PA.

BOYNTON'S STEEL DOME FURNACE

WHY

Are Boynton's Square Pot Furnaces

Taking So Well Among the Trade?

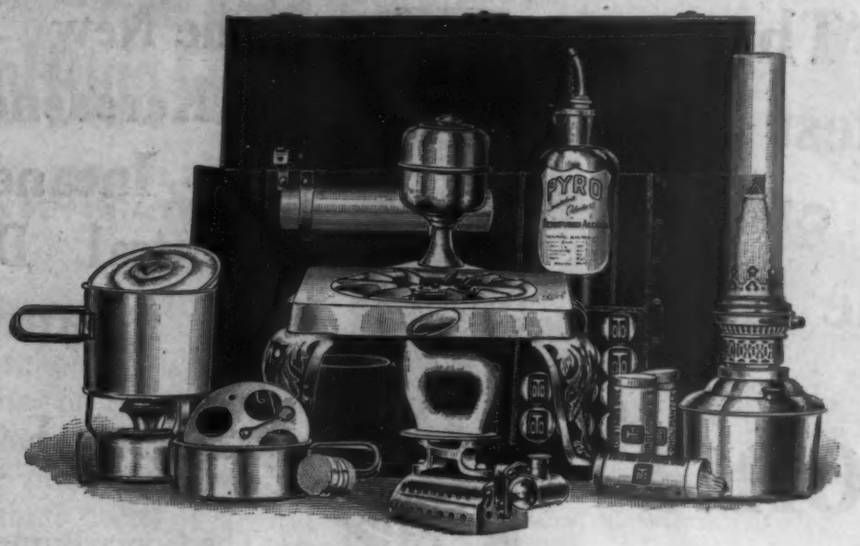
Because they not only have talking and selling points, but because these talking and selling points are **real points of merit** that will stand back of the dealer after he has sold and installed the apparatus.

Write Us for Our Catalogue and Full Description

GET IN LINE

The Boynton Furnace Co.

207-209 Water St., New York
147-149 Lake St., Chicago



Mr Watchful

Your store is the one which is noticeable among the surrounding shops, It is the one which has that look of freshness about it. Its show windows are clean, well lighted and neatly trimmed. In fact, its appearance among stores is like the appearance of the man whose genial personality attracts other men, and its direction is under the eye of just such a man.

Mr Watchful

Of course you have read and heard much of denatured alcohol and of the appliances for burning same, and as we are manufacturers and importers of everything which pertains to this economical fuel, your store is the one in your locality in which we would like our wares displayed. Displaying them is selling them. We need you and you need us. May we send you sample outfit of "OTO" quality denatured alcohol burning appliances as shown below, at a price that will allow you over sixty per cent (60%) profit? Order the following outfit now:

1	No. 101	DENATURED ALCOHOL STOVE	(Illustrated above)	$4.00
1	" 302	" " FLAT IRON	" "	4.00
1	" 205	" " LAMP	" "	4.25
1	" 160	" " CAMPING OUTFIT	" "	1.50
12	" 201M	" " MANTLES	" "	1.80
3	" 201C	HEATPROOF JENA CHIMNEY		.60
			Your Selling Price	$16.15
			Cost to You	**9.30**
			Your Profit	**$6.85**

OTTO THURNAUER.

IMPORT MANUFACTURING EXPORT

310-318 SIXTH AVENUE,

NEW YORK.

"The Greatest Light of The Age"

"Conia"

These Conia Burners give a light from **100** to **350** Candle Power, and the flame can be regulated to any desired height. Positively smokeless, and on account of the enormous candle power will not blacken the mantle.

Mantles in ordinary use will last at least a year.

Retail Price, 35 Cts.

Burners, complete to fit

Standard Oil Company's "Rayo"

Central Draught Lamp, **$3.50.**

Retail Price, Table Lamp complete, **$5.50**

Write today. We want agents in open territory.

The New Kerosene Incandescent Central Draught Lamp

Model 1909

The Conia Burners can also be used on the

Standard Oil Company's "Rayo" Lamp.

It is the Greatest Light for private Residences, Halls, Porches, Country Stores, Churches and Public Buildings.

Chimneys are made in Jena, Germany and will not break from heat.

Retail Price, 35 Cts.

G. Cohn & Co.

(Inc.)

337 Broadway

NEW YORK

"BENGALIA"
Alcohol Blue Flame Cooking Stoves

IDEAL, ODORLESS INTENSE HEATERS

Strong in Construction, Simple and

Far Superior to Any Oil Stove

No. 19 Retail Price, $3.50 Each

No household is complete without one of these alcohol stoves. They are the cleanest and most convenient stoves made and their utility is always readily appreciated wherever they are shown. They are quick boilers (one quart of water will boil in 4½ minutes) and their price puts them in reach of all.

No. 15 With Regulator, Retail Price $2.90 Each

There is an urgent demand for these alcohol stoves wherever their merits are known and the dealers who are handling them find that they are quick sellers and good money-makers.

No. 17 With Regulator and Brass Fount. Price $2.50 Each

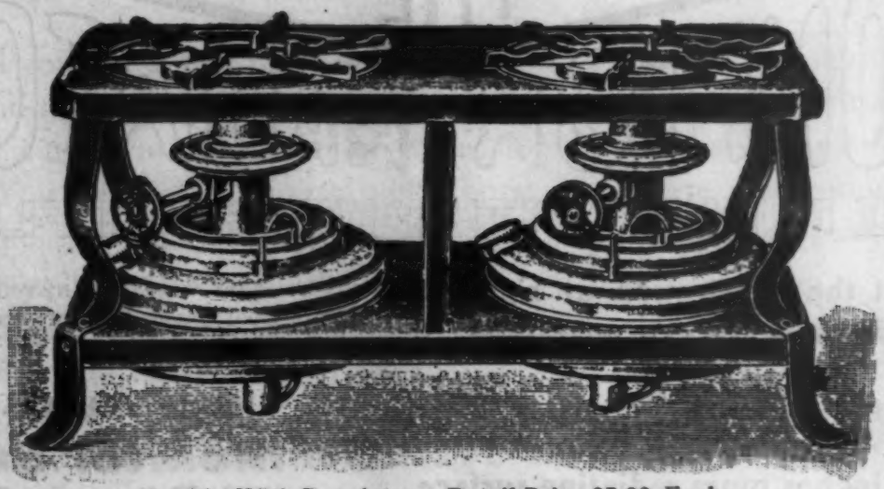
Will Last a Lifetime

—

Economical and Unexcelled

—

Perfectly Constructed



No. 16 With Regulators; Retail Price $5.00 Each.

Absolutely Secure from Explosion or Danger from Fire

—

Extremely Simple

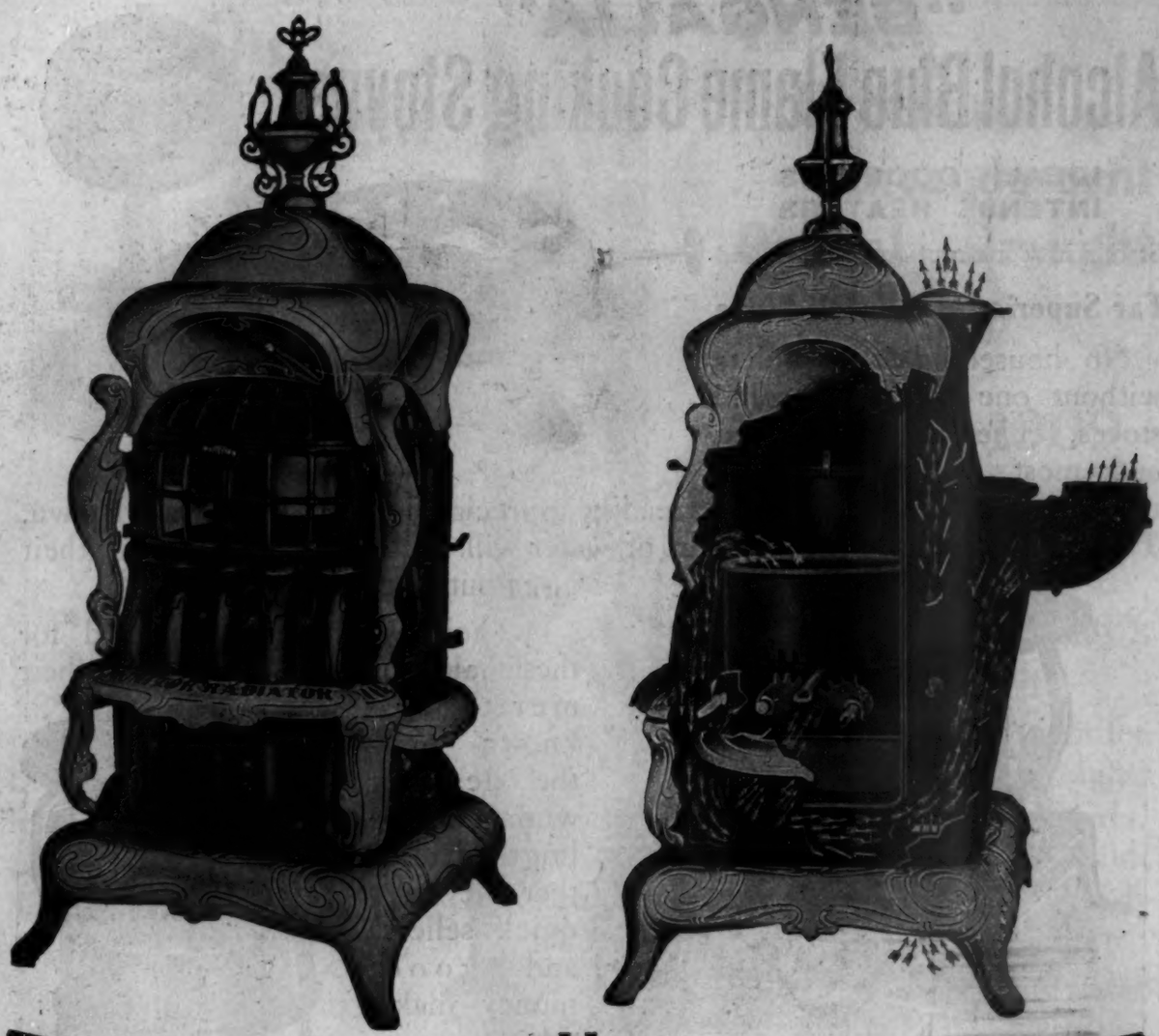
—

Strong and Reliable

We want live dealers in every community to write us to-day for catalog and price lists.

G. COHN & CO., (Inc.)

337 Broadway New York City



THE MONITOR RADIATOR

BASE BURNER WITH FIVE FRONT FLUES

Look at the illustration at right, it shows how we can guarantee

1683

square inches more radiating surface than any other Base Burner made

therefore, the consumption of fuel will be proportionately less. Catalogue containing full detailed description and price upon application.

Do you wan't to increase your Hard Coal Base Burner Sales? If so write to the

MANUFACTURERS

The Monitor Stove and Range Co.

Cincinnati, Ohio

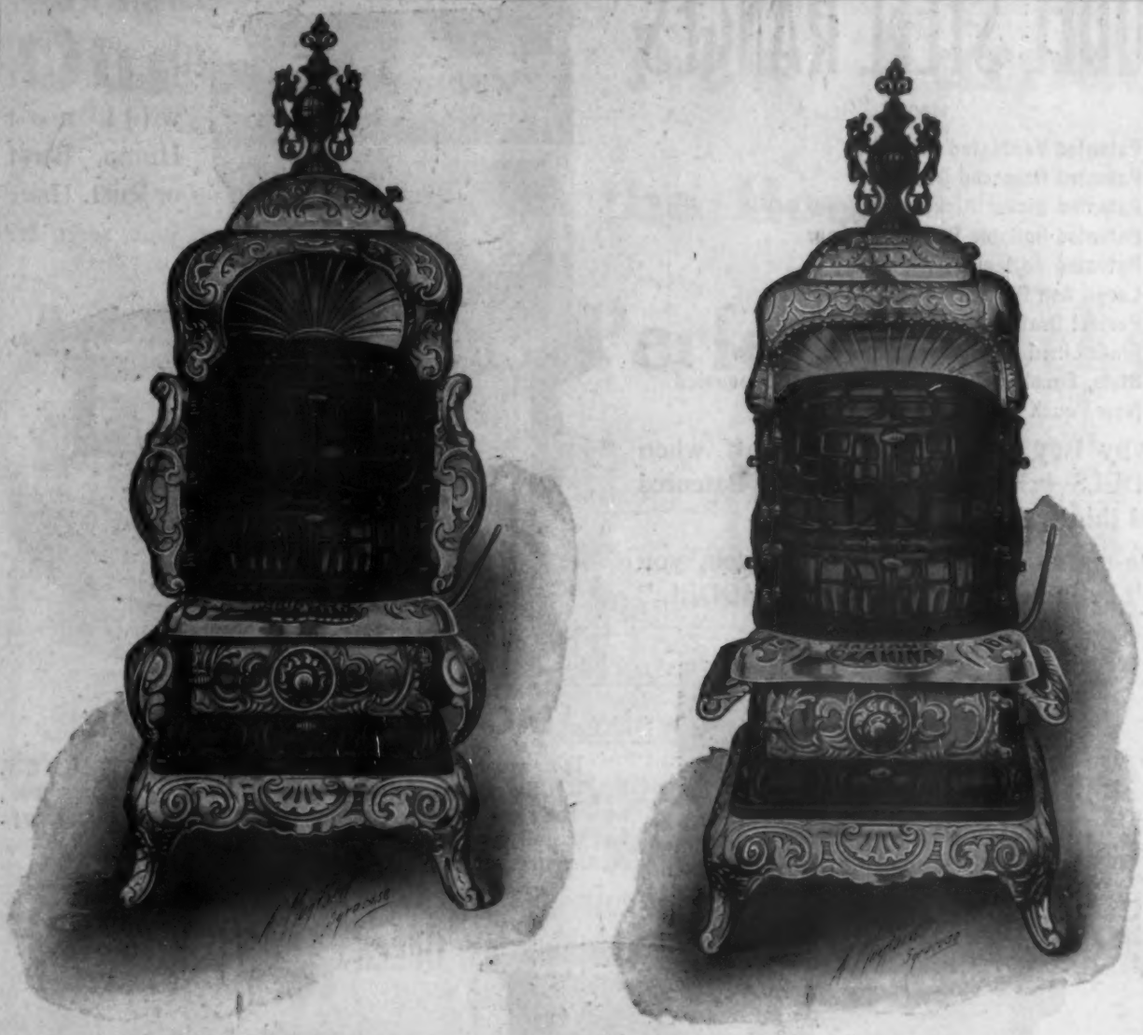
DISTRIBUTORS

For the state of Michigan, Morley Bros., Saginaw, Mich.

For the state of Minnesota and North West, The Great Western Stove and Repair Co., Minneapolis, Minnesota.

For the state of Wisconsin, Morley Murphy Hardware Co., Green Bay, Wis.

For the states of Nebraska, Wyoming, Western Iowa and the Black Hills, Paxton and Gallagher Co., Omaha Neb.



Fox Base Burners

Did you know that the Fox Furnace Co. made Base Burners? They do. And the Fox Co. make good ones, and a lot of Base Burners. The Czarina is made in two grades of three sizes to each style, and has three flues. You never saw better fitted doors. They are all ground joints. The nickel is the best—bright as a dollar. The castings are smooth and they are all blacked and crated.

The best and most particular dealers handle the Fox Furnace Company's Base Burners, and they say that they are the best sellers they ever had. The Fox Furnace Co. make fine Oak Stoves, Hot Blasts, Air Tights, Cook Stoves, Cannons and many kinds of Laundries.

Write for Our Catalogue and Prices and Let Us Show You How You Can Make More Dollars

The Fox Furnace Company

Elyria, Ohio

MODEL STEEL RANGES

HAVE

Patented Ventilated Fire Box
Patented Balanced Oven Door
Patented Nickel Kicker Operated with the foot
Patented Reliable Rolling Damper
Patented Bottom Oven Plate
Large Ash Pit, with Bailed Ash Pan
Perfect Draft Register
Flues Lined with Asbestos and Cast Plates
Style, Finish and Richness of Nickel Unequaled
New Pouch Feed Made in All Styles

Why Buy or Use Common Stuff when MODELS bristle with exclusive Patented good things that cost you no more.

No matter what price is asked you, you can't get a better range than the "MODEL."

This Range has an Oven Bottom that **will not Hump, Bust or Rust.** Have you seen **It?**

MODEL STEEL RANGE

It's worth your while to find out why MODEL RANGES are so **different as to make patents possible;** why they are so **desirable as to make patents necessary.** Let us tell you more about "the Best Talking Steel Range on the market."

IDEAL QUEEN RANGE

Bracket Reservoir, with Steel High Closet and Nickel Band on Main Top.

It's lots better to buy one of these than to buy a Cheap Steel Range. The IDEAL is large, substantial and durable, and is a worker under all conditions. **A Cheap, Light Steel Range is neither.** For durability **Stoves and Ranges must have weight. IDEALS HAVE BOTH. "Set them on the Scales." PROVE IT.**

Queen Oak

IT IS WELL MADE

VERY LOW PRICE

BETTER THAN THE CHEAP ONES
CHEAPER THAN THE BETTER ONES
Numbers 11, 13, 15, 17, 19.

The Portsmouth Stove & Range Co.

PORTSMOUTH, OHIO

OTTO HARNISCH, 1111 Sheridan Ave., Saginaw—Michigan Representative

Our Strictly New Furnace

Built to the Hour

A Powerful Perfect Worker

OUR NEW ONE

WHATEVER IS GOOD, NEW AND MODERN IN FURNACE MAKING HAS BEEN CONSIDERED IN THE PLANNING AND BUILDING OF THIS FURNACE. * HEAVY STEEL PLATE IS DESIRABLE FOR QUICK HEATING WE HAVE IT IN THE LARGE RETURN RADIATOR. * HEAVY CAST IRON IS DESIRABLE FOR DURABILITY IN FIRE SECTION, WE HAVE IT THERE. * LARGE DOORS ARE DESIRABLE, WE HAVE MADE THEM LARGE. * PROMPT RELIABLE ACTION IS ESSENTIAL, THEY ARE HERE CORRECTLY AFFORDED.

THERE IS NO MORE SATISFACTORY FURNACE THAN THIS. THEY MAY TIE IT BUT THEY CAN'T BEAT IT. HEAVY STEEL HIGH RETURN RADIATOR WITH CAST TOP AND BOTTOM. ASBESTOS PACKED JOINTS EVERYWHERE. BIG FIRE-POT, BIG ASH-PIT, BIG CLEAN-OUT, BIG DOORS GROUND TO PERFECT FITTING. HEAVY SEPARATE GRATE BARS. DUST TIGHT. GAS TIGHT. A VERY COMPLETE MODERN FURNACE THAT WILL SATISFY BOTH YOU AND YOUR CUSTOMERS.

WALTER S. RAIT & CO.

211-213 Lake Street, CHICAGO, ILLINOIS.

A BEAUTIFUL HARD COAL BASE BURNER

THE SAPPHIRE

An absolutely air-tight stove, handsomely designed, made of the best materials and a perfect heater.

Many original ideas embodied in **The Sapphire** give it a great advantage over all other Base Burners and greatly increase its utility.

In **The Sapphire** the hot air must circulate around the inside of the base which heats the base much better than the old-fashioned flue strips. The flue strip is hollow in the center, exposing an opening to the floor which draws the cold air from the floor and passing through the hot air ventiduct can be transferred to another floor or room.

Fitted with Duplex Grate which can be removed by removing one bolt. Heavy Removable Fire-pot. Large flue capacity.

WRITE FOR CATALOG TO-DAY.

SHERIDAN STOVE MFG. CO., Quincy, Ills.

Foster's Winner

A Steel Range with all the latest improvements of practical value. This is a range which embodies many distinct and valuable features which mark it at once as the most serviceable as well as the most durable range on the market.

The Body is made of heavy, polished, Wellsville Steel, strongly riveted every two inches, and lined with asbestos throughout. Balanced oven door. Swing ash pit door. Wood extension firepot. Duplex grate. Heavy cast linings. Cast encased reservoir with large enameled tank. Full sized ovens.

Just what the Trade is looking for, a range of superior merit at prices which are right.

Write for Catalog to-day.

The Foster Stove Co.

IRONTON, OHIO

NOTHING ANTIQUATED, NOTHING UNRELIABLE ABOUT THE CONSTRUCTION OF

MATCHLESS STEEL RANGES

No. 2420. Weight 450 lbs.

PERFECT IN OPERATION IN CONSTRUCTION IN QUALITY

Price Net $22.32

They are ranges that the dealer can conscientiously recommend and the quality is there to back him up.

No inferior material or faulty workmanship can be found in their make-up. They approach as near perfection as it is possible for a range to come.

There is good money in the Agencies of Matchless Ranges for the dealer who secures them. This is a range that can be pushed with every assurance that the purchaser will get satisfaction and **it makes friends wherever it is shown.** Our guarantee bond is given with every range which guarantees the fire linings for three years.

Choice territory open for hustling salesmen.

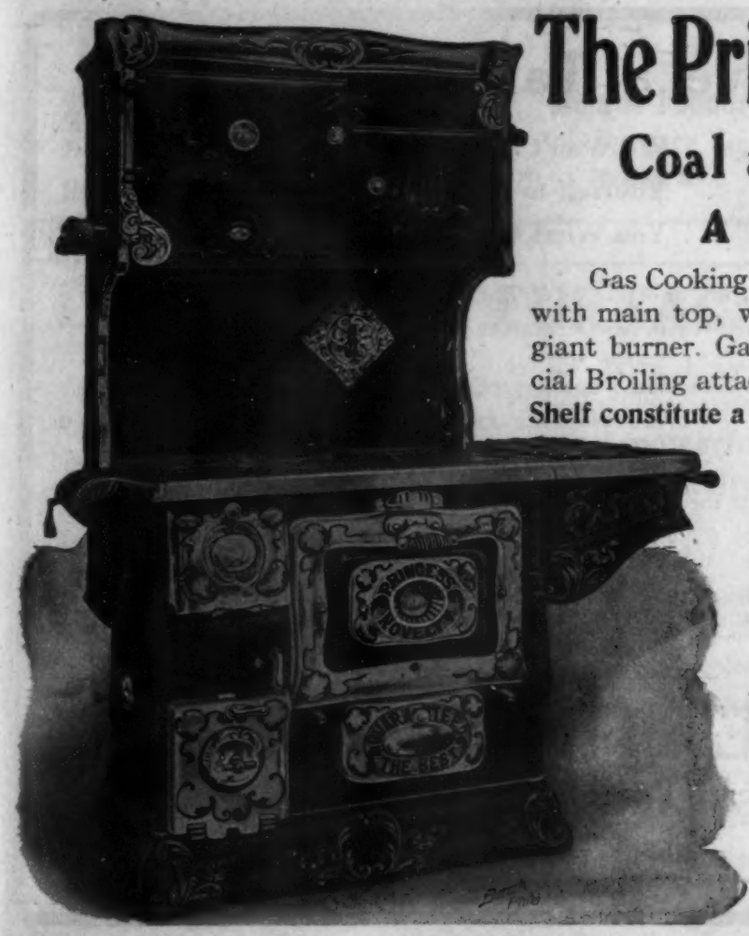
OUR CATALOG MAY BE HAD UPON REQUEST, WRITE FOR IT

LANDAY STEEL RANGE CO., 2621 NORTH FIFTEENTH STREET ST. LOUIS, MO.

The Princess Novelty

Coal and Gas Range

A Real Specialty



Gas Cooking Shelf at right end of Range flush with main top, with two regular burners and one giant burner. Gas Closet with large oven and special Broiling attachment. **The Gas Closet and Gas Shelf constitute a complete, convenient, capacious and efficient Gas Range, and with these attachments the housekeeper has, in the Princess Novelty, the best coal Range ever built and a first-class highest grade Gas Range, all occupying no more space than an ordinary coal Range.** The Gas Closet and Gas Shelf are furnished for either artificial gas or natural gas. The Princess Novelty Range requires no blacking.

Abram Cox Stove Co.

American and Dauphin Streets - PHILADELPHIA
5 to 19 West Lake Street - - - CHICAGO

Place your orders for prompt attention with

THE OLD RELIABLE

Ohio Stove Company

PORTSMOUTH, OHIO

Satisfactory service assured under entirely new management.

MR. DEALER!

Are You the Man

looking for a specialty that will attract trade, yielding a good profit?

It Will Pay You

to get acquainted with the quality features of
THE IMPROVED PATENTED

PRINCESS STEEL RANGE

Where it is known it commands the bulk of the trade.
Ask for Special Agency Proposition.

ALLEN MFG. CO.. NASHVILLE, TENN.

May We Have a Talk With You?

We Won't Bore You—or Ask You to Commit Yourself to Anything—We Just Want to Tell You What We Think of Trade Conditions.

Many furnace men are reading our "Short Talks on Heating".

If there's no dealer selling Kelsey Warm Air Generators in your town you will find these Heating Talks interesting

We have no theories to present, and there's nothing technical about these Talks.

They are intended for the man who is interested in doing better work and in building up a good profitable heating business.

Any live energetic man can practically control the profitable part of the heating business in his town—if he only goes after it along the right lines.

Our "Short Talks" will give you some practical pointers—will show you how **you** can make more money in the heating business.

Write us a postal card: "Please send me your series of 'Short Talks,'" and if there's no Kelsey agent in your town, we'll put your name on our mailing list promptly, and you will receive the balance of this interesting series.

KELSEY HEATING COMPANY

SYRACUSE, N. Y.

NEW YORK: 156 Fifth Avenue. CHICAGO: Van Evera & Lewis Mfg. Co., 104-106 Lake St.

James Smart Mfg. Co., Brockville, Ont. Sole Makers for Canada.

THE
"ONE-MINUTE"
MONITOR RADIATOR STOVE
(BASE BURNER)

IT SELLS IN ONE MINUTE

SECURE THE AGENCY NOW OR YOUR COMPETITOR WILL

PAXTON & GALLAGHER COMPANY
OMAHA, NEB.

EXCLUSIVE DISTRIBUTORS FOR THE WEST

Simplicity, Durability, Economy and Capacity

All of which are essentials of the Really Good Furnace are featured in the

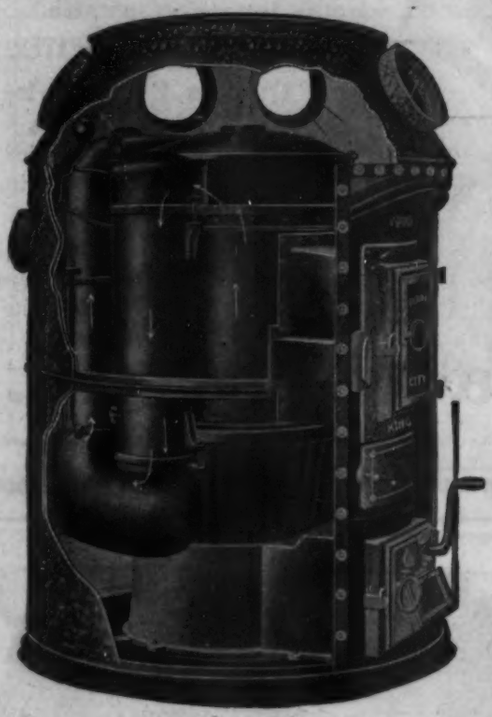
MONCRIEF
TOP RETURN FLUE WARM AIR FURNACE

In the MONCRIEF Furnace special attention has been paid to the little details, and efforts in that direction have not been wasted as they have assisted materially in making this a furnace which is unsurpassed for operation and durability.

FEATURES: Burns all grades of hard and soft coal; all cast iron; Moncrief Duplex Grate; large radiating surface; double fire-pot; large grate surface and cleanliness in use.

Write for Catalogue.

HENRY & SCHEIBLE CO.
825-29 Long Ave., N. W., Cleveland, Ohio
J. C. KIMMEL, 3314 E. 15th Street, Kansas City, Mo., Western Sales Agent.



One of the many styles in which

Floral City Furnaces

are made

Write for catalogue and prices. We can interest you.

Monroe Foundry & Furnace Co.
Monroe, Mich.

THE APEX WARM AIR FURNACE

is an extra heavy, durable furnace with **a most powerful heating capacity.** Its construction is strong enough to resist the fiercest fire. Absolutely gas tight. Will burn hard coal, soft coal or coke. Simple to operate, economical and thoroughly efficient.

Write to-day for Catalogue

YOUNGSTOWN FURNACE & SUPPLY COMPANY, Youngstown, Ohio

Chicago Office, 211-213 Lake Street

ROOD & McINTYRE, Kansas City, Mo., Southwestern Distributors

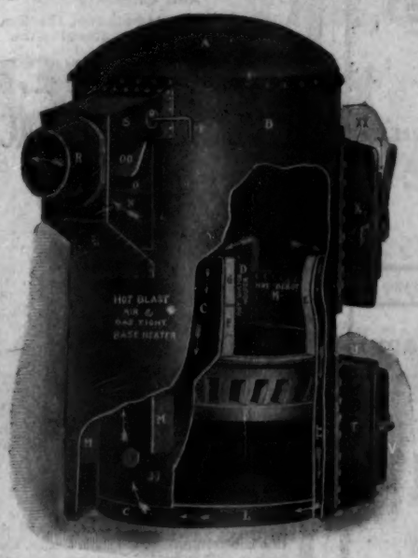
I now have a man and want you to take out my "ad." I find THE AMERICAN ARTISAN a very great assistance to anyone wanting help, as it seems to have a great circulation. Thanking you very much, I am, Resp'y

M. T. S. Liesveld,
Hickman, Nebraska.

Are You Making Enough Money

OUT OF YOUR FURNACE BUSINESS?

If not handle the



Quaker Steel Furnace

(The acme of modern scientific furnace construction.)

HEAVY STEEL. ABSOLUTELY GAS TIGHT. BASE HEATER.

Burns any kind of fuel. Every **Quaker Furnace** installed is a permanent advertisement for more business.

Quaker Steel Furnaces command a better price from your customers. There is always a nice profit in handling **Quaker Furnaces.**

Let us send you the names of some of our money making dealers who put in **Quakers** exclusively, and who have captured the business of their town. Write them yourself. If they can make money you can. Write for our catalogue. We will help you sell **Quaker Furnaces.** Ask us about it.

Quaker Manufacturing Co.

Dept. A, 40 DEARBORN STREET, CHICAGO, ILL.

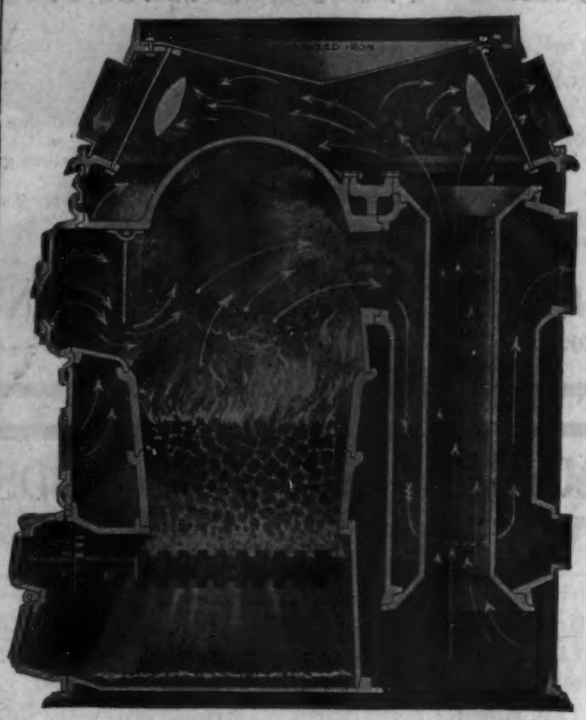
Monarch Air Blast

All the advantages of our famous MONARCH plus the air blast. This is a sectional upper fire pot constructed so that oxygen is fed into and above the fuel burning the gases, assuring economy, cleanliness. It is the most practical soft coal furnace offered the trade.

Forest City Foundry & Mfg. Co.

CLEVELAND, OHIO

Mfrs. The Imperial, Niagara and Combination Furnaces, Registers, Mail Boxes, Hitching and Sash Weights, Etc. Write for our new Catalog.



Shaded Sectional Cut

of the

"Low Down" Crown Warm Air Furnace

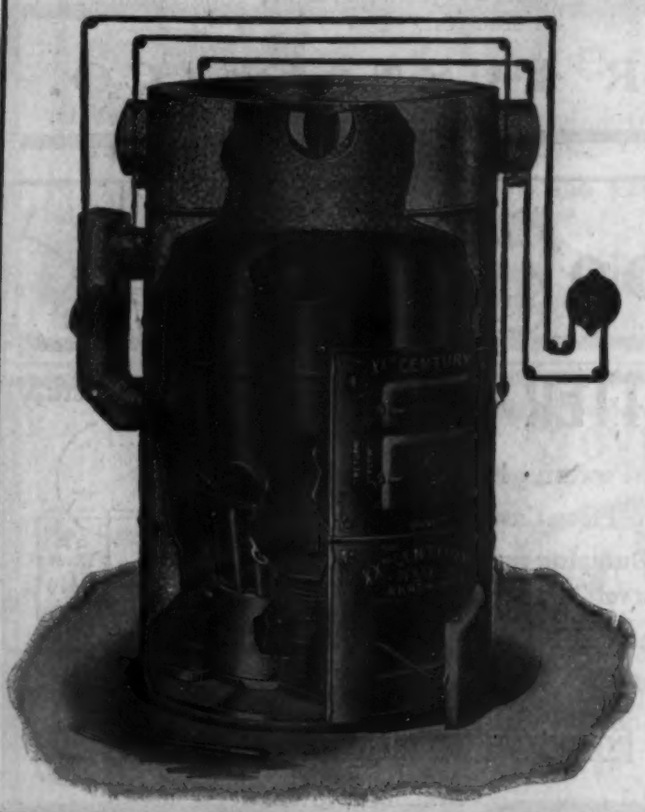
Designed to show the direction taken by the gases and warm air. Also the thickness and staunchness of its parts.

The March-Brownback Stove Co.

POTTSTOWN, PA.

Chicago Agency, JOHN KONTNY, 264 South Clinton Street.

OUR "D SERIES" FURNACE



Is a splendid heater. It is of all cast construction and practically indestructible. Is a quick worker and possesses the very best features of furnaces of this type.

Note the all cast radiator which affords a wonderful amount of radiating surface.

Big Fire Pot, big ash pit, big combination feed door, big radiating surface.

A perfect worker. Economical, reliable, durable, prompt.

For an all around excellent heating furnace there is none better than our "D Series." Made with either a Drop Front or Revolving Grate, which are interchangeable.

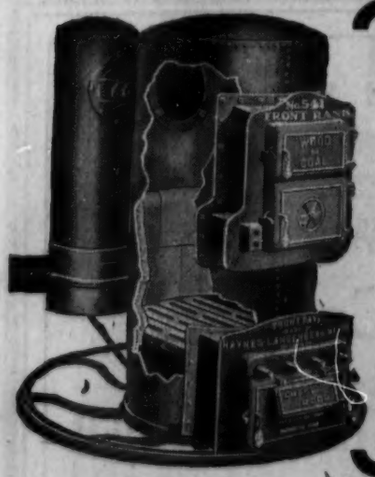
Made in five numbers — 150, 250 350, 450 and 550.

Get Our Catalogue

The XXth Century Heating & Ventilating Co.

Manufacturers of the Original and Only Genuine Line of XXth Century Heaters

AKRON, OHIO



A Furnace That's Different!

You know as well as we do that almost all furnaces are alike in construction —and that your competitor can quote just as low a price as you.

With this FRONT RANK Furnace you can go after a prospective customer with a line of argument that is entirely different.

The FRONT RANK is made of heavy sheet armor plate, riveted like a boiler. It can't bulge apart, and it can't leak gas.

There are no "cup joints" in which the cement can shrivel up and allow gas to escape.

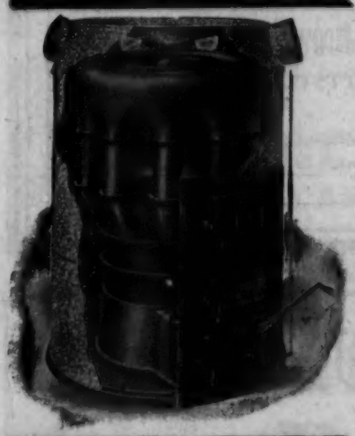
The FRONT RANK Furnace offers a mighty fine opportunity to one good dealer in each town.

Do you want our proposition?

HAYNES-LANGENBERG MFG. COMPANY

4045-57 Forest Park Blvd., ST. LOUIS

YOU MAY CLAIM YOU CANNOT SELL GOODS OF QUALITY—WE SAY YOU CAN



IT can be done by explaining to your customer why the article costs more than one of inferior make —show him where he is getting his money's worth for the higher price he pays.

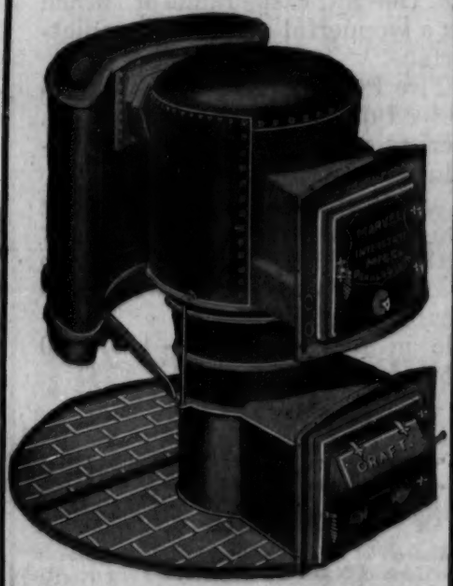
Apply this rule to your heating business by selling MUELLER Furnaces—explain that they are worth more than others because they are guaranteed to contain more direct heating surface than any other heater made, which means economy and power.

They are fuel savers—saving fuel saves money.

Durability is one of the MUELLER strong points—many MUELLER Furnaces having been in constant use for over 25 years, without repair and still giving good satisfaction.

L. J. MUELLER FURNACE CO.

Established 1857 **191 Reed Street, Milwaukee, Wis.**



FURNACE WITH CAST FIRE POT.

800 Series MARVEL HEAT PRODUCERS

BETTER FURNACES

Large Powerful Heating Surfaces.

Two-Piece Cast Iron Pot.

Flat Dumping and Shaking Grate, or Marvel Triangular Bar Grate.

Large Feed Door. **Well Made.**

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INTERSTATE MANUFACTURING COMPANY

OSKALOOSA, IOWA

OUR NEW ONE

This is a strictly up-to-date, modern furnace.

Every improvement necessary to make it the Best on the market has been embodied in its construction.

Built to give perfect service of the best materials, it is a most reliable and powerful heater and will give complete satisfaction. Write for printed matter of our complete line.

Walter S. Rait & Co.
211-213 Lake Street
Chicago, Ill.

THE CHAMPION
Hot Water Combination Boilers
THEY FIT ANY FURNACE

They fit close into the dome and have an open front at fire door. In small heaters base section can be used alone. One or more rings may be added for additional capacity to be determined by the amount of hot water radiation to be used. All joints absolutely tight.
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FRANK D. STOLZ, Manufacturer
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THE Ideal Epworth Acetylene Co.
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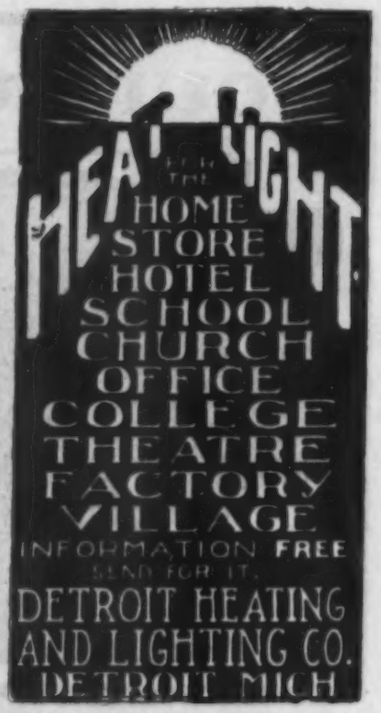
The Ideal Epworth Acetylene Generators

Are Ideal in construction, Ideal in light producing power, Ideal in giving out steady light, Ideal in selling qualities, Ideal in lighting Dwellings, Stores, Hotels, Churches and Towns. Acetylene light is the safest, best, cheapest, brightest, finest light in the world, when produced in the Ideal Epworth Generators.

Satisfaction Guaranteed. Agents Wanted.

IDEAL EPWORTH ACETYLENE CO., JOHNSTOWN, PA. [Successors to Epworth Gas, Light & Heating Co., Waterloo, Iowa. WATERLOO, IOWA



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The BEST Air Drying Iron Enamel Made.

Try a 1-Dozen Case From Your Jobber

Nickel Plate Stove Polish Co.
CHICAGO.

Large 10 oz. Can.

Readily Mixed

Black
Brilliant
Durable
Water Proof
Rust Proof

Dry Powdered and Oil Paste
STOVE POLISH
KEEPS IN ANY CLIMATE—FOR DEALERS' USE.

A-B

METAL POLISH IRON ENAMEL — BRILLIANT and LASTING

A-B POLISH CO., 8-14 Haddon Ave., CHICAGO, ILL.

Gilt Edge Badger Furnace

designed to meet the wants of those desiring a furnace for burning **Hard Coal**

With its **Large Ash Pit Doors, Solid Base Plate, Large and Roomy Ash Pit, Heavy Sectional Fire Pot and other valuable features,** all weaknesses so common to many other furnaces of like principle are overcome. This is a high-grade furnace, a perfect worker and sells at a moderate price.

Our Catalog may be had upon application
WRITE FOR IT.

Side Wall Registers

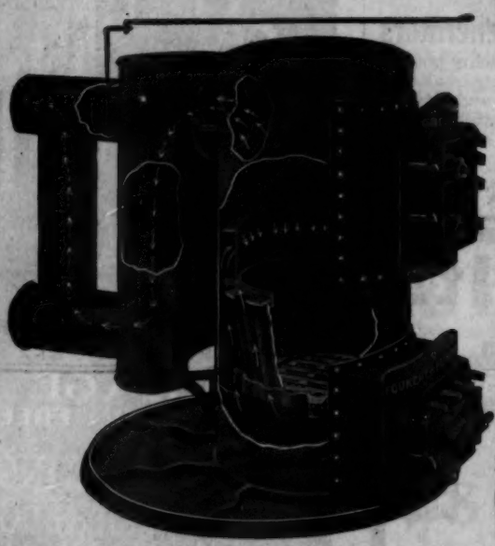
The PERFECT Registers.

SCHWAB'S SIDE WALL REGISTERS are the neatest in Design, Best in Construction and Noiseless in Operation.

Write for Illustrated Catalog.

R. J. SCHWAB & SONS CO., MILWAUKEE, WISCONSIN

Your Furnace Business



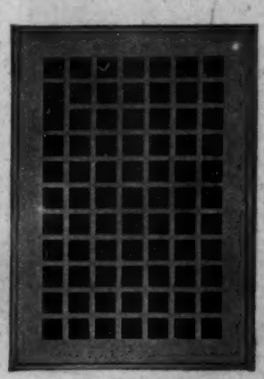
in 1908 will be much larger than it was in 1907, if you can show your prospective customers something better than your competitor is showing. Why not sell a furnace combining all of the desirable features of furnace heating?

GREEN'S BASE HEATER

is built with a **slotted fire pot,** thoroughly consuming the smoke and gases, and **reducing the cost of fuel.** The fire pot is the most durable of any used in Steel Furnaces as the **ashes cannot accumulate behind it.** The heat penetrating through the pot and steel surrounding it, makes **every inch of this furnace heating surface from the bottom plate to the top.** A powerful heater, something good which your customer will appreciate, something better than your competitor can show. Large radiator with **long smoke travel; double feed doors;** grate bars which operate **independently of one another,** with hollow centers; deep ash pit. A furnace which **costs no more than any good furnace,** but heavy, durable, combining all of the **advantageous features of furnace heating. Write for our Catalogue.**

Green Foundry & Furnace Works

Dept. "A" DES MOINES, IOWA



Variety=Quality=Efficiency

168 Sizes Floor Registers in five designs Vertical Wheel.
84 Sizes Floor Registers in two designs Glide Movement.
37 Sizes Convex Registers in three designs.
11 Sizes Circular Top Registers in two designs.
14 Sizes Round Registers in two designs.
42 Sizes Mouse Proof Vent Plates.
4 Sizes Convex Base Vents.
10 Sizes Special Side Wall Registers in three designs.
6 Sizes Reversible Wafers in two designs.
3 Sizes Pedestal Registers.
43 Sizes Lock Asylum Registers in two designs.
135 Sizes Wall Frames 2" and 4".

FERROSTEEL CAST—WROUGHT STEEL—MODIFIED STEEL,
Every known Special and Stock finish. Write for our Catalog and discounts.

FERROSTEEL COMPANY, Cleveland, Ohio.

The Hero Furnace

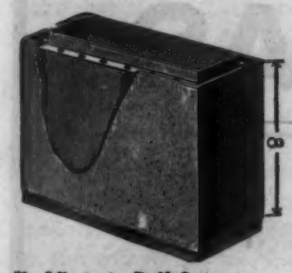
For any kind of Fuel

Showing Smith's Cleanable Water Heater

Cast or Steel Radiator.
Large Double Feed Doors.
Independent Grate Bars.
Everything an up-to-date furnace should have.
Catalog tells all about it, also about our

New Hero Boilers

CHAS. SMITH COMPANY
101 East Lake Street, CHICAGO, ILL.



The MICHIGAN SAFETY FURNACE PIPE COMPANY

Corner Brooklyn and Abbott Streets,
DETROIT, MICHIGAN.

The STIFFEST and BEST Machine-made Pipe on the Market.

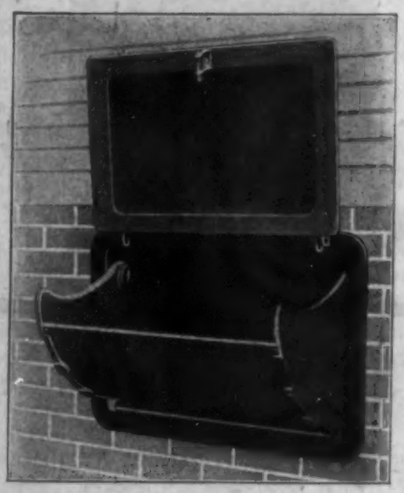
The only Sectional Furnace Pipe made in which the Inner Walls Form the Cross Walls.

No Wings to Pull Out. Write For Catalog. No Cleats to Bend.

Our Large Factory Insures Prompt Delivery.

We are not Connected with any Combination. Do not get us Confused with Other Manufacturers.

MAJESTIC COAL OR WOOD CHUTE



¶ Thousands in use and the demand is rapidly increasing.

¶ *Two Styles, either with unbreakable glass in door or solid cast door.*

¶ Burglar Proof, They protect the building where the most damage is done,

¶ *Secure Agency.*

¶ *Catalogue Free.*

MAJESTIC FURNACE & FOUNDRY CO.
HUNTINGTON, INDIANA

It Will Pay You

to illustrate your advertisements in your local papers. A sheet of comic advertising cuts sent on application.

These cuts are furnished with catchlines showing their application to the hardware, stove and tinners' trades.

Address

DANIEL STERN
358 Dearborn St., - CHICAGO

Quick Comfort Gas Heating Stoves

New and Neat DESIGNS

Constructed Especially for the Economical Use of

NATURAL GAS

PERFECT in Operation Built so as to Secure the Proper Combustion of the Fuel and Produce the Required Amount of Heat

RINGEN STOVE CO.

DIV. OF AMERICAN STOVE CO.

ST. LOUIS, MO.

SAN FRANCISCO, CAL., Indiana St., Between 20th and 21st

ESTABLISHED 1880.

THE AMERICAN ARTISAN & HARDWARE RECORD

Representative of the Stove, Tin, Hardware, Heating and Ventilating Interests.

PUBLISHED EVERY SATURDAY.

TERMS OF SUBSCRIPTION IN THE UNITED STATES AND ITS POSSESSIONS. (Invariably in advance): ONE YEAR, POSTAGE PAID, $2.00. IN FOREIGN COUNTRIES INCLUDING CANADA, ONE YEAR, POSTAGE PAID, $4.00.

Address all Letters, Communications, and Remittances to

DANIEL STERN, PUBLISHER AND PROPRIETOR,

355 DEARBORN STREET, CHICAGO, ILL.

Entered as Second-Class Matter June 25, 1885, at the Post Office at Chicago, Illinois, under Act of March 3rd, 1879.

THIS PAPER IS A MEMBER OF THE CHICAGO TRADE PRESS ASSOCIATION.

CHICAGO, AUGUST 8, 1908.

THE car efficiency committee of the American Railway Association in its bulletin dated July 30, giving a summary of surpluses and shortages by groups of roads from October 30, 1907, to July 22, 1908, places the total surplus 5,120 more than the figures for July 8, of which 3,406 are in box cars and 1,466 in coal and gondolas. Against this increase, the first since April 29, the committee has reports showing a decrease of 3,000 in the number of bad cars, making a net increase of only about 2,000 in the grand total of idle cars. Any marked improvement in the situation could hardly be looked for in July, which is normally a light month with the railroads.

EARNINGS of the United States Steel Corporation for the month of July are estimated at $8,000,000, the largest monthly returns of the current year and the largest since November, 1907, when they were $10,467,250. Since the bad break in earnings following the October panic the steel corporation's monthly net earnings have run as follows:

July	$ 8,000,000	February	$ 5,709,428
June	7,482,797	January	5,052,743
May	6,021,279	December	5,014,728
April	6,761,680	November	10,467,253
March	7,466,834		

In 1907, 1906 and 1905 the July earnings were the smallest of the third quarter. The fact that the July earnings of the United States Steel Corporation are larger than for any month this year, should be convincing proof that business conditions are rapidly approaching the normal, for July is usually one of the quietest months of the year.

PROSPECTUSES have been issued of the new Northwestern University commercial school, which will be opened in the Northwestern University building, Lake and Dearborn streets, Chicago, on October 5. Some of the leading business men of Chicago have pledged both money and active personal interest to the school, among whom may be mentioned Joseph Shaffner, David R. Forgan, A. C. Bartlett, Edward E. Butler, Richard C. Hall, W. F. Hynes, E. C. Kimball, A. G. Mitten, M. B Starring, Orville G. Williams, A. W. Shaw, and Arthur Young. The special lecturers announced for the first year's work are Edward E. Butler, F. A. Delano, A. J. Earling, Thomas A. Hull, George E. Roberts, C. H. Hulburd, Towner K. Webster, and George E. Caldwell. It is with a large measure of gratification that THE AMERICAN ARTISAN learns of the advanced steps that have been taken toward the establishment of another commercial school. That a sound business training is absolutely essential to success in any commercial pursuit, is to-day being realized to a greater extent than ever. The need of it is apparent to everybody. The promoters of this new institution should receive the hearty support of every business man in Chicago.

Government Insures Its Employes.

THOUSANDS of government employes will be insured against accidents incurred in the line of duty by the government liability statute, which went into effect on August 1. Rules covering the operation of that law have already been drawn up by the Bureau of Labor and are now being sent to all parts of the country. These regulations determine the methods which are to be pursued by injured employes in securing their compensation. They provide that all blank forms for filing claims shall be obtained from the officers who have supervision over the employe; that when, through an accidental injury, an artisan or laborer becomes entitled to compensation under the act, he must make out a claim for compensation, accompanied by the certificates of a duly authorized physician and his superior official. These certificates must be forwarded to the Secretary of Commerce and Labor not only when the claim is made, but on every payday thereafter until the employe is able to return to work.

The government liability law, which was one of the last submitted for the President's signature by the recent session of Congress, provides that any person employed by the United States as a laborer in any of its manufacturing establishments, arsenals, navy yards, river and harbor and fortification work, on the Panama Canal or in other hazardous undertakings, who is injured in the line of duty, shall receive his usual wages for a year or until he has recovered. In case of death the yearly wage is to be paid to the widow, children under sixteen or dependent parents. No compensation will be paid to an employe whose injury is due to negligence or misconduct, nor unless the disability shall continue for more than fifteen days.

The government in enacting this law has done something that should merit the commendation of all right-thinking people. Many of Uncle Sam's employes are called upon to perform work beset with manifold dangers, and the wisdom of enacting the liability law will be apparent to all those who are familiar with the working conditions of government employes, who as artisans or laborers are in duty bound to toil amid surroundings not altogether conducive to their physical well-being.

The Trade Paper.

THE trade paper is to-day regarded as the most potent factor in the dissemination of facts and information regarding marketable commodities, essentially necessary to the selling thereof. It is a specific medium for delivering specific intelligence to a specific class of people. Readers of its pages must of necessity be interested in the commodities which it advertises, and a considerable proportion of them are prospective buyers of the class of goods which its columns treat of. It is a great source of economy to the manufacturer, the jobber and the dealer in finding markets for their goods, for it assists its advertisers in every way possible in making their commodities known to the trade to which it caters. As a selling medium its value cannot be overestimated, for it does the work more effectively and with less cost than it otherwise could be done. Its value to the traveling salesman is also great, for it introduces his goods to the prospective purchaser before the latter is reached by the salesman. Consequently, when the buyer is informed beforehand of the merits of the goods, the salesman has less difficulty in convincing him that his line of merchandise is worthy of his investigation. As has been aptly said, "trade papers are clearing houses, bringing inventor and manufacturer, buyer and seller, producer and jobber and consumer, together in the shortest time, and at the least expense of labor and money to each."

The advertisements in a trade journal are read with the same degree of interest that its news columns are. A trade paper without advertising would be as useless as a lamp without oil, for, unlike the daily paper, the trade publication circulates only among those who are possible buyers of the articles advertised. It is a well-known fact that sales of large magnitude have been brought about by an advertisement in a trade journal when the purchaser may not have been able to recall the ad. It is a fact, none the less ridiculous, that a business man will sometimes not hesitate to hire an extra salesman at an expense of, say four or five hundred dollars a month, who would complain strenuously when asked to insert a small advertisement in a trade paper at a cost away below that of keeping a salesman on the road for thirty days. The salesman is lucky if he can call on two or three hundred prospective customers in a month, while the story could be told four times through the trade journal to many thousand interested people in the same time.

The value of the trade paper depends entirely on its paid circulation. A subscriber who does not value his paper sufficiently to pay the small subscription price each year, seldom covering the actual cost of placing it in his hands for fifty-two weeks, rarely takes it out of the wrapper, is of no benefit either to the publisher or the advertiser. It has always been the policy of THE AMERICAN ARTISAN to make its pages so readable and instructive that each issue is eagerly looked forward to and subscriptions renewed without solicitation. THE AMERICAN ARTISAN does not keep on its mailing list names of individuals who manifest so little interest in the paper that they fail to renew their subscriptions. Such a policy can never be productive of good either to the publisher or the advertiser. The man who gives no thought to his business, who neglects his trade journal and remains in ignorance of what is going on in his line, and who trusts somebody to do those things for him, usually wakes up with vain regrets.

Few Failures in July.

COMMERCIAL failures in the United States, according to statistics compiled by Dun's Review, were 1,232 in July, with liabilities of $14,222,126. This is the lightest mortality of any month in the last year, with the single exception of May, and the increase in that comparison was less than $600,000. In the corresponding month last year there were 777 failures, involving $12,334,710 in amount. Manufacturing failures last month were 314 in number, against 211 in July, 1907, while the amount of liabilities was $5,835,018, compared with $4,449,226 a year ago. There were 871 trading failures for $6,160,713, whereas in the same month last year 531 defaults occurred in this class and the amount involved was $4,802,907. Failures of financial concerns, including banks and similar institutions not properly included in commercial failures, were nine in number and $35,250,146 in amount. In the same month last year there were four failures in this class, with liabilities of $2,228,945.

Liabilities of failures in leading branches of business for July are compared below with the previous year:

	1908.	1907.
Iron, foundries, etc	$ 149,091	$ 91,342
Machinery and tools	278,528	903,560
Cottons, lace, and hosiery	37,200	.....
Lumber, carpenters, etc.	2,029,239	896,587
Clothing and millinery	335,227	439,413
Hats, gloves and furs	33,000	29,900
Chemicals and drugs	20,000	21,200
Paints and oils	24,159	64,629
Printing and engraving	290,297	299,590
Milling and bakers	46,580	233,449
Leather, shoes, and harness	451,076	90,567
Liquors and tobacco	107,068	176,053
Glass, earthenware and brick	658,584	184,093
All other	1,374,969	1,018,843
Total manufacturing	$5,835,018	$4,449,226
Traders—		
General stores	$ 694,326	$ 711,014
Groceries, meats and fish	676,620	485,860
Hotels and restaurants	380,376	1,325,811
Liquors and tobacco	476,529	239,073
Clothing and furnishing	472,899	245,426
Dry goods and carpets	490,058	398,978
Shoes, rubbers, and trunks	296,011	62,854
Furniture and crockery	169,238	62,187
Hardware, stoves and tools	303,284	146,933
Chemicals and drugs	250,328	139,611
Paints and oils	41,849	14,582
Jewelry and clocks	183,697	2,793
Books and papers	158,135	3,700
Hats, furs and gloves	34,450	4,000
All other	1,532,913	960,085
Total trading	$6,160,713	$4,802,907
Brokers and transporters	2,226,395	3,082,577
Total commercial	$14,222,126	$12,334,710

Classified returns show that in the manufacturing division exactly seven branches of business reported smaller liabilities than the same month last year. Money is now abundant for all legitimate purposes, and commercial paper may be sold at reasonable rates of interest, so that there is no longer any danger of

really solvent concerns being forced to suspend by inability to raise funds, and new undertakings are again being financed. The industrial situation is exhibiting a trend toward better times in the United States.

RANDOM NOTES AND SKETCHES.

BY SIDNEY ARNOLD.

They tell me that Acting Postmaster General Grandfield has solved a problem which bade fair to become troublesome. He has decided officially that a woman could not be a mail-carrier without making it decidedly embarrassing for her and causing her to lose her womanly modesty, and incidentally her skirts. Several weeks ago an order was issued establishing a city free delivery in Idaho Falls, Idaho, and a young woman, whose name the department withholds, was the only applicant to qualify. The civil service commission certified her name to the department, and the question arose as to whether a woman was eligible for appointment. The young woman was said to be on the point of receiving the appointment when it was discovered that there was a law in existence requiring the Postmaster General to designate the character of the uniform to be worn by carriers and describing it generally. In large, bold type it stated that carriers are to wear trousers. When this discovery was made it was decided to ask the civil service commission to hold another examination.

* * *

Here are the plans on which the pants must be "built," according to section 759 of the postal regulations:

FOR SUMMER WEAR.

Trousers—Of same material as coat, with black cloth cord one-fourth inch wide down the outside seam. Side and two hip pockets to be made of strong, durable material.

FOR WINTER WEAR.

Trousers—Of same material and color as coat (bluish mixed cadet flannel of a heavy bluish gray worsted or serge), with fine broadcloth piping one-fourth inch wide down the outside seam. Side and two hip pockets to be made of strong durable materials.

It is said that Acting Postmaster Grandfield's modesty compelled him to refrain from asking the young woman who made application for the position as mail-carrier, whether, if appointed, she would comply with the law and regulations regarding dress. It seems to me that she might yet be able to qualify for the job. What would be the matter with her wearing a directoire skirt of light material even over the regulation pants? I am sure that no hue and cry would be raised against it. A directoire skirt would be just the garb for a woman mail-carrier, especially if she were compelled to do much traveling.

* * *

The science of war may be revolutionized if the rapid firing gun invented by William Patten, of 270 West One Hundred and Thirty-sixth street, New York, can duplicate in the field the work of a ten-inch model which he has built and is demonstrating. The gun is noiseless and is fired without powder. And this is not all. Mr. Patten asserts the gun can discharge bullets faster than they can be loaded into the magazine, and that the loading speed therefore is practically the only limit to the number of shots that can be fired. He maintains that 50,000 shots a minute can be discharged from this new weapon, and says that he'll demonstrate this when he gets the full-sized one in commission. The gun is fired by centrifugal force. All there is to it is a big wheel with a crank for revolving it. In the ten-inch model this can be turned by hand. A motor of fifty horsepower would be required to turn the six-foot model Mr. Patten hopes to build. Bullets—not shells such as are used in other guns, but simply balls of lead or steel—are poured into the gun. The operator revolves the wheel and the bullets begin to pour out in a steady stream. They fly so fast that they have the appearance of one long, leaden ribbon, and if the gun is revolved on its base the stream of lead would sweep around in an arc which would mow down anything in front of it. The inventor of the new gun is said to have got his idea from seeing a flywheel burst five years ago in England, where Mr. Patten was born. He came here a year later and eighteen months ago began work on the model of his gun, which he has had in mind since leaving England. The gun is of brass and is said to more closely resemble a meat chopper than anything else. Not long ago Mr. Patten screwed his device to a table and then poured a handful of buckshot into it. At the opposite side of the room was a target and the inventor pointed his gun toward it. Then he began to turn the handle. Bullets flashed from the mouth of the little gun in a perfect stream. Each one is said to have hit the target. The second test at the target forty feet away resulted in the gun sending 400 buckshot into a space five-eighths of an inch in diameter in less than a minute.

* * *

Great Scott! Imagine a gun looking like a meat chopper firing 3,000,000 shots an hour. This sounds to me like a fish-story that has been metamorphosed 3,000,000 times. I wonder what Hiram Percy Maxim would have to say about such a monstrosity. Mr. Maxim knows a thing or two about guns, for he has invented enough of them, his latest being a noiseless one which is said to be especially adapted for shooting dangerous canines, without giving them a chance to ascertain what struck them. Three million shots an hour! I'd hate to be given the job of keeping the gun loaded, even if a church full of bullets and a steam shovel were placed at my disposal. What would be the use of any nation supporting a standing army if it were in possession of a gun or two like this? A handful of men would be sufficient to put out of business an entire army.

* * *

A concern up in Michigan recently had a novel window display, which illustrated the economy, convenience and efficiency of the gasoline stove in the summer time. The stove was placed in the window with an oven open toward the front. In the oven was a cake of ice, some fresh beef, a watermelon and a lot of vegetables, while on top of the stove was a kettle boiling merrily. It was the purpose of the display to show that the heat of a gasoline stove is applied exactly where it is needed and that there is no waste heat. It would be a difficult thing, I imagine, to arrange a more convincing display for a summer stove than this.

News Siftings

Frank E. Meily succeeds H. H. Kreider as president of the Lebanon Stove Works of Lebanon, Pa., Mr. Kreider having died recently.

Warren L. Fish, claimed to be the inventor of the first oil stove, died at Newark, N. J., on July 24, at the age of 83 years. Mr. Fish was also the inventor of various other devices.

The Indiana Stove Works, Evansville, Ind., have recently added to their plant a fire-proof storage vault for the storage of their stove patterns. The building is three stories high and measures 30 x 105 feet.

The Magnolia Stove and Range Co. of Belleville, Ill., has been incorporated with a capital stock of $30,000 to manufacture stoves and ranges. The incorporators are Carl A. Klinge, W. W. Culver and O. E. Buder.

The Baxter Stove Co. of Louisville, Ky., has been organized by Louis Butterwick with a capital stock of $8,000. The company has purchased the patent rights of Dr. W. E. Baxter upon a small collapsible stove which will be manufactured especially for camping purposes, etc. R. Wise of Louisville is president of the new concern.

The Franklin Stove Co. of Columbus, O., is designing a special line of gas heaters. The officers of the company are: President, F. N. Habercorn; vice-president, J. W. Hastings; secretary, C. N. Evans; treasurer, P. C. Carroll. President Habercorn was for twenty years a designer of stoves with one of the largest stove makers in the country. John W. Hastings is general manager of the company.

The Youngstown Furnace and Supply Co. of Youngstown, Ohio, which, some months ago, took over the patterns, flasks, machinery and equipment of the Pennsylvania Stove Co., of Ellwood City, Pa., has recently put on the market two cast-iron coal ranges and are now completing patterns for a cheaper gas range. They have also recently completed an entirely new line of furnaces for coal, in four sizes, and will have it is said, a new furnace for gas by September 1. The Youngstown Furnace and Supply Co. are moving their Youngstown plant and the Ellwood City plant to Niles, O., located a few miles from Youngstown, where they have already erected a warehouse and mounting room 60 by 250 feet. They purpose erecting a nickel room 35 by 60 feet and a foundry 100 by 125 feet.

The Born Steel Range Co. of Cleveland, O., has sent out an interesting little booklet on the Panama Canal which takes the place of their regular monthly news letter for July, and intended to be a little mid-summer souvenir. The booklet contains a history and description of the Panama Canal by William Wirt Mills. It contains illustrations of various scenes in the canal zone and of the notable men who are prominently connected with the greatest engineering feat of the present time. The Born Steel Range Co. states that in their August news letter they will give a detailed advertising plan of how they intend to aid dealers in selling their ranges. It is the company's intention in the August letter to explain a window display plan which they will furnish to every dealer or prospective dealer who will send for it. When writing The Born Steel Range Co., kindly mention THE AMERICAN ARTISAN.

The Landay Steel Range Co., 2621 N. 15th street, St. Louis, Mo., are said to be having an exceptionally good season with their "Matchless" steel ranges. In putting on the market their line of "Matchless" ranges the Landay Steel Range Co. realizes that a range should be built more for service than for style, and they say they have not lost sight of the fact that there is a growing demand from the masses for a steel range wherein workmanship, quality, economy and elegance are combined, and yet be sold at a moderate price. The company says that "Matchless" ranges can be conscientiously recommended by the dealer, for no inferior material or faulty workmanship is said to exist in their make-up. The company furnishes a bond with every range that they sell, guaranteeing the fire linings for three years. A catalogue may be had for the asking. When writing for it, kindly mention THE AMERICAN ARTISAN.

THE WM. CONNORS PAINT MFG. CO.

Attention is called to the advertisement of The Wm. Connors Paint Mfg. Co., Troy, N. Y., which will be found on the front cover of THE AMERICAN ARTISAN. "American Seal" stove putty and asbestos furnace cement have been used by the majority of the stove and furnace manufacturers of the United States and Canada for many years with perfect satisfaction, and the demand among the jobbers for these goods has reached wonderful proportions during recent years. "American Seal" elastic oil roofing cement is another product of this well-known house which has attained marked success. This cement is used on slate tile or metal roofs and will not chalk, crumble or crack. It remains elastic under all conditions and the best evidence of its superiority is the fact that many roofers of the country demand the "American Seal."

The various cements above enumerated are put up in one, two, three, five and ten-pound cans, packed in cases for the jobber's convenience and also in twenty-five and fifty-pound pails, tubs of 140 pounds and barrels of 180 pounds. The Wm. Connors Paint Mfg. Co. will forward their booklet on "American Seal Specialties," to those interested. When writing them kindly mention THE AMERICAN ARTISAN.

THE SHIVELY PURE AIR STOVE.

The Stove and Range Co. of Pittsburgh, Pittsburgh, Pa., says that the Shively Pure Air Stove is especially designed for heating and ventilating one-room schoolhouses. The company states that the man who invented and patented the Shively Pure Air Stove received his early education in a "cross road" schoolhouse, not forgetting the cold floor, the frosted windows and that the scholars near the stove were suffering from heat, while those seated on the side aisles were suffering from cold. The Shively stove, the makers say, draws the cold air from the floor and replaces it with warm air. In addition to this, it is said to maintain a strong and constant circulation from and to

every part of the room, maintaining nearly an even temperature at every point. This stove may be easily connected, it is said, to draw air from out of doors, heating it to the proper temperature and diffusing it though the room in a constant flowing stream. The Shively Pure Air Stove is made with a 20 or 22-inch fire-pot and will burn wood or coal. The Stove and Range Co. of Pittsburgh says that one of these stoves will increase the average attendance and scholarship of almost any rural school. Seeing that the time is fast approaching when school days will begin again the Stove and Range Co. of Pittsburgh urges the dealer to get in line with his school board with a view of interesting it in the Shively stove, which as above stated, is especially adapted for heating and ventilating a one-room school-house. When writing the company kindly mention THE AMERICAN ARTISAN.

CHAMPION HOT PLATES AND MISSION COOKERS.

The Champion Steel Range Co., 3950 West 25th street, Cleveland, O., manufacturers of the celebrated Champion Interchangeable steel range, are sending to the trade a folder descriptive of Champion hot plates and Mission cookers. Champion hot plates are manufactured for either natural or artificial gas, and are furnished with cast-iron loose-cap burners or drill burners, as desired. The 300 series of these plates are of an extra fine grade. There is a loose removable grate over each burner. The frames are finished with hard baked black japan, and the legs are nickel-plated, the valves being of nickel-plated brass. The top cap of each burner is removable, permitting the burner to be easily cleaned. Each burner gives two rings of flame. The burners of the 200 series of Champion hot plates are cast, and are provided with loose caps, each burner giving two rings of flame and controlled by a lever valve. The top frames are finished in hard black japan, on the japan style, and full nickel-plated on the nickel style. The plates of this series have larger and wider frames than the 300 series.

The Champion Mission cooker is said to be something new in gas-cooking stoves. With this cooker and a steel or tin oven, the manufacturers say anyone can have a first-class, permanent gas-cooking and baking apparatus at a small cost. These cookers stand 28 inches high, the frames being built of steel after the Mission style, are of strong construction, and are guaranteed to bear any reasonable weight. As a laundry stove the Champion Mission cooker is said to be without an equal. These cookers are made in two and three-burner styles. The folder will be mailed on application. When writing for it kindly mention THE AMERICAN ARTISAN.

THE PORTSMOUTH STOVE AND RANGE CO.

The Portsmouth Stove and Range Co. of Portsmouth, Ohio, manufacturers of the well-known "Model" steel ranges, report that they are very busy getting ready for the fall business which they anticipate will be unusually heavy. They are running on full time and have been doing so all through the panicky period. Their "Model" steel range, they say, is meeting with great success wherever introduced. It is provided with a patented ventilated fire-box, and a patented balanced oven door, nickel kicker and rolling damper. This range has a large ash-pit provided with a bailed ash pan. The flues are lined with asbestos and cast plates. An important feature of the "Model" range is the oven bottom, which is guaranteed not to hump, break or rust. The finish and richness of the nickel on this range is said to be unequaled. The company says that the "Model" is "the best talking steel range on the market."

The "Ideal Queen" range, another very popular range manufactured by the Portsmouth Stove and Range Co., is large, substantial and durable, and is, the makers say, a worker under all conditions. Their Queen Oak stove has also acquired a marked degree of popularity among the trade. It is of substantial construction and is said to be a very efficient heater. The Portsmouth Stove and Range Co. will be glad to furnish detailed information concerning their stoves and ranges and to mail upon request literature descriptive of the same. When writing them kindly mention THE AMERICAN ARTISAN.

THE MONITOR RADIATOR.

The Monitor Stove and Range Co., Cincinnati, O., report that they are having a very successful season with their Monitor five-front-flue radiator, a base-burner upon which the company guarantees 1,683 square inches more radiating surface than is possessed by the average stove of this type. The front part of the Monitor radiator radiates the greatest amount of heat, the fire and products of combustion passing down the five front flues and then up the rear flues of the stove. No base-burner on the market, the makers assert, is provided with larger hot-air flues or ventilating flues than the Monitor. The manufacturers claim that the consumption of fuel is less, and the radiation of heat for the amount of fuel consumed, is greater than that of the average base-burner, the maximum amount of iron surface being exposed to the products of combustion and heat elements. Dealers who may be anxious to increase their hard-coal base-burner sales would do well to investigate the good points of the Monitor radiator. The Monitor Stove and Range Co. is said to have some good territory open for agents who may be looking for a base-burner of exceptional efficiency and reliability. A catalogue containing full detailed description of this well-known stove may be had for the asking. When writing the Monitor Stove and Range Co., kindly mention THE AMERICAN ARTISAN.

Every traveling man who comes into your store has a story to tell that is worth telling. It must be worth it, or else his firm wouldn't keep him on the road day after day at a cost of dollars and dollars. The story may not be worth your listening to, but that you cannot tell until after you have listened. Every traveling man who comes into your store should have your courteous attention, whether you want to buy goods or not.—*Bagology.*

The Hardware Record.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly. You will find these on pages 40 to 45 inclusive.

The knife factory of W. M. Maier of Bernville, Pa., was damaged to a considerable extent by fire on July 23.

The Tennessee Retail Hardware Association will hold its annual meeting at Nashville, Tenn., on August 13 and 14.

Mark Lacey of Jefferson, Wis., has been appointed to the position of traveling salesman for the American Steel & Wire Co.

A plant for the manufacture of washing machines is shortly to be erected at Enid, Okla. Thomas Gettle is at the head of the enterprise.

Washboards will be the products of a plant that is in course of erection at Franklinville, N. C., Kersey Bros., being the promoters of the industry.

The Kentucky Saw Works of Louisville, Ky., has been incorporated with a capital stock of $6,000 by James B. Senior, G. G. Summers, Abraham Levy and others.

The Wyeth Hardware & Mfg. Co. of St. Joseph, Mo., is planning the erection of a new warehouse to take care of the additional business that the company is said to be handling.

The Weidenbeck-Dobelin Co., of Madison, Wis., has been incorporated by Theodore E. Weidenbeck, Charles W. Dobelin and H. J. Brinkhoff. A hardware jobbing business will be conducted.

The Ward Nail Co. of Youngstown, O., has been incorporated with a capital stock of $10,000, by David R. Ward, David Tod, Louis S. Baldwin, Anthony B. Calvin and Albert B. Stough.

The Janesville Barb Wire Co. of Janesville, Wis., has recently increased its working force in the wire fence department. The company is erecting a new building to take care of its increased business.

The convention of the Retail Dealers' Hardware & Implement Association of Texas will be held at Dallas, Tex., on January 19, 20 and 21, 1909. O. E. Schow of Clifton is president of the association.

It is reported that a factory is to be erected at Salina, Kan., for the manufacture of galvanized steel hay rakes. A company with a capital stock of $15,000 has been formed, with Wesley Kouns of Salina at the head.

Fredrick Gensch, senior member of the Gensch Hardware Co., of Omro, Wis., died on July 22 at the age of 69 years. He was formerly from Manitowoc, and leaves two sons, who will succeed him in the business.

The Wisconsin Retail Hardware Association is sending out a folder giving some detailed information concerning the association, and urging members to increased efforts toward enlarging the membership. The folder reports trade good throughout the state of Wisconsin, and with the present outlook for crops the Wisconsin Retail Hardware Association looks forward to a big fall trade. The association now has a membership of 690.

Joseph G. Morgan, a former resident of St. Clair, Pa., died at his home in Mahanoy City, Pa., on July 22, at the age of 50 years. Mr. Morgan was engaged in the hardware business in Mahanoy City for upwards of 20 years.

R. F. Struthers of Peoria, Ill., has obtained a site for a factory in Omaha, Neb., where lightning rods, fencing, etc., will be manufactured. Mr. Struthers is now operating plants for the manufacture of these commodities at Peoria, Ill., and Des Moines, Iowa.

George Maloney for a number of years a prominent hardware man of Franklin, Pa., died in Philadelphia on July 28th. Mr. Maloney who was born in Ithaca, N. Y., in 1849, was one of the most prominent citizens of Franklin, having served many terms in the city council.

The Boston Bolt Co. of Boston, Mass., manufacturers of nuts and bolts, will erect a five-story addition to its plant, 50 by 100 feet. The company expects to have the building completed by the end of the year. It will be fully equipped with the most modern machinery for the manufacture of machine screw products.

John Selzer, a prominent hardware dealer of Morning Sun, Ia., died on July 26 at the age of sixty years, after having been prostrated by the heat. Mr. Selzer was a native of Hillsboro, O., and established a hardware business in Morning Sun some thirty-two years ago. He is survived by a wife, five sons and one daughter.

The fifth annual picnic of the Iowa Retail Hardware Association was held at Clear Lake, Ia., on July 31, and in point of attendance was the most successful the association ever held. The party took a trolley ride from Mason City to Clear Lake and a boat ride to Oakwood Park. Among the interesting features of the picnic were a wrestling match, ladies' stake-driving and rifle-shooting contest, boys' sack race, ladies' ball-throwing contest, fat man's race and tug-of-war. The prizes awarded included many very serviceable articles. Mr. Geo. B. Streeter was the marshal of the day.

At the recent meeting of the Pacific Coast Hardware and Metal Association, the following officers were elected for the coming year: President, T. D. Honeyman, Honeyman Hardware Company, Portland, Ore.; vice-presidents, E. T. Messinger, Hunt & Mottet Company, Tacoma, Wash.; William Schaw, Schaw-Batcher Company, Sacramento, Cal.; H. R. Boynton, H. R. Boynton & Co., Los Angeles, Cal., and A. A. Watkins, W. W. Montague & Co., San Francisco, Cal.; treasurer, F. J. Baker, George H. Tay Company, San Francisco; secretary, Eugene Goodwin, San Francisco.

The Michigan Retail Hardware Association will hold its convention at the Hotel Cadillac, Detroit, on August 12, 13 and 14. Secretary Arthur J. Scott of Marine City, Mich., expects a larger attendance of members this year than ever. The fact that the convention will be held during buyers' week, when the

wholesalers and manufacturers of Detroit will entertain some four thousand merchants from Michigan, Indiana and Ohio, makes it a certainty that the Michigan Retail Hardware Association will be well entertained while in that city. William B. Thompson, Mayor of Detroit, will deliver the address of welcome to the association on behalf of the city, at the opening session on August 12.

The Peck-Hamre Mfg. Co., Berlin, Wis., who manufacture the well-known "Gem" line of mail boxes, latches, trucks, etc., have recently made a number of improvements to their "Gem" No. 4 rural mail-box, which is provided with a self-closing door. A drop-letter slot has been placed in the door of this mail-box, which is protected by a storm-proof flap. The company is confident that the improvements that they have made in the "Gem" mail-box will add greatly to its popularity. The "City Jewel" mail-box is attractive in appearance and is finished in a dull black enamel which is baked on at a high temperature, rendering it practically rust-proof. The company's "Gem" and "Jewel" line of specialties are widely known as goods of merit. When writing the Peck-Hamre Mfg. Co., kindly mention THE AMERICAN ARTISAN.

CATALOGUES FOR COUNTRY HARDWARE RETAILERS.

THE AMERICAN ARTISAN has of late been receiving a number of inquiries concerning the advisability of retail hardware dealers in country towns issuing catalogues, it having been suggested that under certain conditions the issuing of catalogues by country dealers might be a paying proposition. The subject is one that has created not a little interest among the trade in all sections of the country, and with a view of obtaining definite information as to what extent and with what success catalogues are being issued by country merchants, THE AMERICAN ARTISAN invites its readers to send in their views upon this important subject, so that publication may be given them. Any dealer who may have a copy of his catalogue to spare, would confer a favor upon THE AMERICAN ARTISAN by forwarding it, together with any information upon the subject that might prove of interest to the trade. Names and addresses will be withheld if so desired.

To THE AMERICAN ARTISAN:

With reference to the subject of the issuing of catalogues by hardware retailers in country towns, I am unable to say to what extent dealers in the state of Oklahoma have used this form of advertising. It has been brought to my attention, however, that certain dealers have issued small catalogues with gratifying results.

Last year the firm of Robberson & Ridge of Duncan, Okla., with which I am connected, issued a small catalogue, giving prices on implements, wagons, buggies, stoves, hog fence, etc., and the results were entirely satisfactory. We believe, however, that a circular will serve the purpose nearly as well, it, of course, being a great deal less expensive.

We sent out circulars this year showing cuts of implements and quoting prices, and we believe that so far as the implement trade is concerned, the results were fully as satisfactory as would be obtained from a catalogue.

Yours truly,

BEN F. RIDGE.

President Retail Hardware & Implement Dealers' Association of Oklahoma.

Duncan, Okla., July 27, 1908.

To THE AMERICAN ARTISAN:

We would say in regard to the hardware dealer issuing a catalogue that we very much approve of the plan, having tried it for two years and believing that we received more returns for our money than any other way we have advertised.

We issue two editions of our Hardware Bulletin, one being the spring and summer edition and the other the fall and winter one. One thousand copies are mailed and distributed, the cost of printing being about $25.00. Our bulletin is made up by ourselves with the help of the manufacturers' cuts, most of which are furnished free.

Sincerely yours,

JOHN MACKEY & SON,

429-431 Phoenix St.

South Haven, Mich., August 1, 1908.

To THE AMERICAN ARTISAN:

I am of the opinion that a retail store can get out a catalogue that should prove to be a trade getter. Conditions should be very closely studied as to the needs of the trade, and the articles advertised should be adapted to the season in which the catalogue is issued. All merchandise advertised in such a catalogue should be only that which you expect to keep regularly, and of standard brands. Stoves are well advertised in this way, also paints, brushes, silver ware, woven fencing, etc.

I do not believe in getting out an issue of a retail catalogue too often. It should pour forth the merits and quality of the goods and not be a catalogue of low prices, because a catalogue that quotes low prices hurts the retail trade generally in that locality where it is issued.

Yours truly,

J. H. ROPER,

President Roper Hardware Co.

Parker, So. Dak., July 29, 1908.

To THE AMERICAN ARTISAN:

Regarding the issuing of catalogues by retail hardware dealers in small towns I am not informed of any of the Arkansas dealers issuing a general hardware catalogue and do not think same would be practicable for several reasons. A catalogue without prices would be almost useless and unless the prices were exceedingly low would invite competitive price cutting. In my opinion the additional expense of issuing and keeping up a catalogue would exceed the amount derived from same.

We have found, however, that the mailing of bulletins showing specials and seasonable goods, has been our best method of advertising.

Yours very truly,

J. P. SIMPSON,

Simpson Hardware Co.

Malvern, Ark., July 28, 1908.

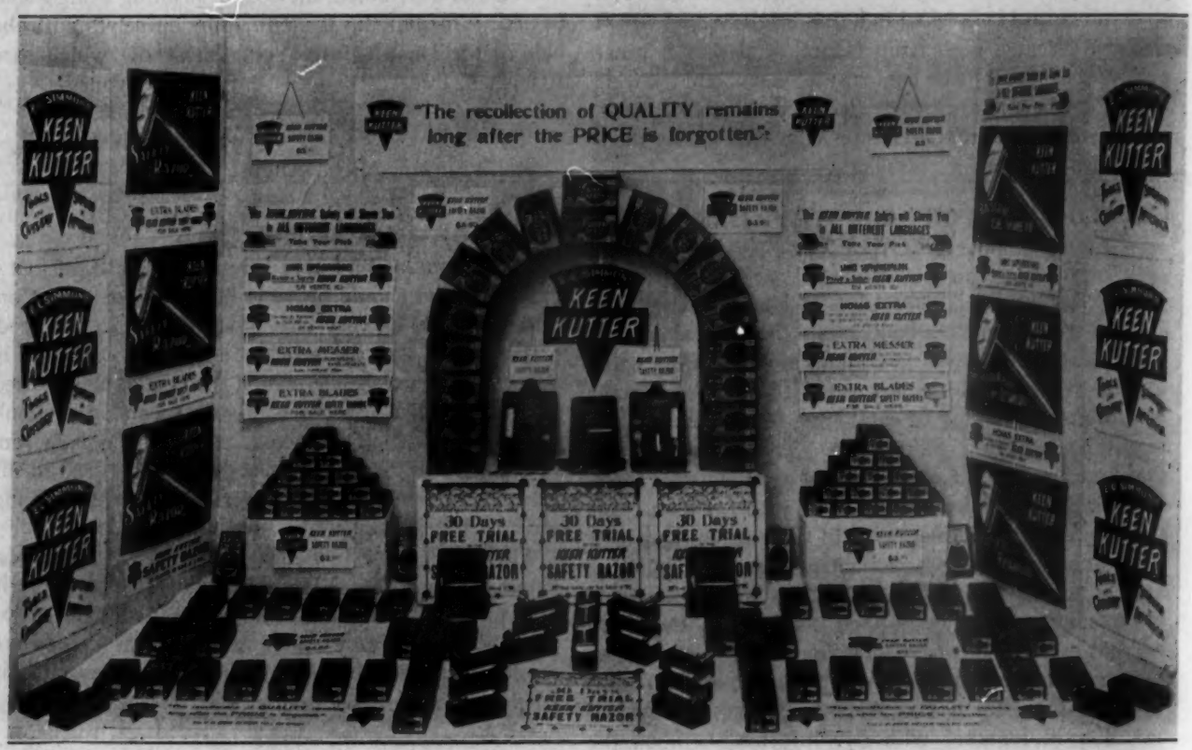
KEEN KUTTER SAFETY RAZOR WINDOW DISPLAY.

The Simmons Hardware Co. of St. Louis is sending to the trade a circular illustrating and describing a Keen Kutter Safety Razor Window Display which they have had set up and photographed. They are furnishing to the trade the poster cards, boxes and an arch made of boxes similar to that shown in the display, so that all the customer will have to do will be to place it in his show window.

The design which is illustrated herewith, shows a window six feet wide by three feet deep. This same display may be used in a 5-ft. or an 8-ft. window by simply extending the goods or drawing them closer together as may be necessary.

The background was made of ordinary white cheese-cloth, which was selected for the purpose of securing a good photograph. For the re-production of the window a robin's egg light blue paper was used. The Simmons Hardware Co. are supplying their customers with 15 yards of paper 30 inches wide, an ample quantity for covering the background, sides and back, the floor or bottom as well, and also the three wooden boxes used in making the display. The company suggests that the paper be tacked to the background and on the boards, beginning at either side and running across rather than to cut it in short lengths and tack it up and down. The back and sides can be made of ⅜-inch rough boards. The back of the window designed by the Simmons Hardware Co. required eight boards, nine inches wide and 4½ feet long with a strip 3 inches wide nailed on the back at both top and bottom. Each of the two sides contained four boards nine inches wide and 4½ feet long, which were fastened together at the top and bottom.

The base for the arch was an ordinary packing box, 32 inches long, 12 inches high and 9 inches deep, covered with the same paper as the background. The boxes placed on either side of the arch upon which stood the pyramid of boxes were 13 inches long, 6 inches wide and 6 inches deep. These were also covered with the same paper. The central arch was formed of 18 of the large size empty boxes in which Keen Kutter safety razors are put up. These boxes were wired and pasted together with cardboard. To save their customers the trouble of making these arches, the Simmons Hardware Co. puts them together and ships the boxes already wired and pasted, and all the dealer has to do when he unpacks the display, will be to turn the boxes so that the labels will be down and then bend them into the proper shape to form the arch, which will be to a 20-inch circle.



Keen Kutter Safety Razor Window Display.

The Simmons Hardware Co. says that the display, although of simple construction, is very effective. The light robin's egg blue paper which forms the background in connection with the bright and varied colored display cards is said to make a very attractive showing. The goods contained in the window designed by the company, included two safety razor traveling sets and 22 Keen Kutter safety razors. When writing the Simmons Hardware Co. concerning this display, kindly mention THE AMERICAN ARTISAN.

CATALOGUE OF THE LUFKIN RULE CO.

The Lufkin Rule Co., of Saginaw, Mich., is distributing their Catalogue No. 8 which is fresh from the press, illustrating and describing measuring tapes and rules of every description. The book measures 6 by 9 inches and contains 96 pages replete with illustrations of the goods manufactured by the company. The cov-

er of the catalogue is handsomely embossed in two colors, the body stock being of a fine grade of heavy enameled paper. Among the goods listed in the catalogue may be mentioned "Reliable"steel measuring tapes, "Reliable" frame steel tapes, "Challenge" steel measuring tapes, "Rival" tapes, engineer's pattern steel tapes, "Germania" frame steel tapes, phosphor-bronze tapes, surveyors' chain tapes, "Artisan" steel tapes, pocket steel and linen tapes and the complete line of "Universal" measuring tapes. The Lufkin Rule Co.'s line of rules embraces various kinds of machine divided steel rules, the decimeter rule, folding steel rules for the pocket, tinners' steel circumference rules and numerous types of wooden rules, yardsticks, squares, log rules, etc. The "Perfection" glass board described in the catalogue is a modern device enabling a merchant to cut glass mathematically accurate, in inches or fractions of inches as desired. The board is made of narrow strips of well-seasoned lumber, is ruled both ways in even inches, and has a steel rule at the front graduated in inches and eighths. The straight edge is fitted with a simple device by which it may be moved forward or backward, and can be fixed by means of a set screw at any point desired. It is said to be an indispensable article to all dealers in window glass. Catalogue No. 8 of the Lufkin Rule Co. is one of the most complete catalogues of measuring tapes and rules that we have seen. It will be forwarded on request. When writing for it kindly mention THE AMERICAN ARTISAN.

"OUR DRUMMER" FOR AUGUST.

The August issue of "Our Drummer," Cataiogue M C 677 of Butler Brothers, Chicago, contains many interesting features, and is replete with the usual number of spicy suggestions and trade pointers. Butler Brothers' annual "School Sale" is given special attention in this catalogue, the aim of this sale being to provide Butler Brothers' trade with the good things they need to put in the window in order to bring the profitable school supply business their way. The firm announces that not a single commonplace thing is to be found on the pages devoted to their annual "School Sale." The "$2.25 Sale" offers a large number of items in all departments at the uniform price of $2.25 per dozen. Among the articles included in this sale may be mentioned preserve kettles, rinsing cans, coffee mills, shears, wash boards, button pliers, tape measures, pastry boards and a 26-in. hand saw. Butler Brothers say that the response to their recent campaign in price-tickets has been so quick and so generous that it leads them to suggest that it may be worth while for dealers to put a price-ticket on every article in their stores. The tinware and enameled ware department, as usual contains a vast selection of articles that Butler Brothers are offering at attractive prices. The hardware list is, as usual, up-to-date and very complete. Considerable space is devoted in the catalogue to "specials" in seasonable hardware, wire goods, farm and garden tools, etc. Butler Brothers announce that many of their customers are doing a good stove business by ordering one sample each of different styles, putting same on display and not buying another until the first is sold. This plan they recommend as especially good in localities where the competition of the retail mail-order houses is strong. When writing for Catalogue M C 677 kindly mehtion THE AMERICAN ARTISAN.

RETAIL HARDWARE DOINGS.

NEW FIRMS AND INCORPORATIONS.

Neillsville, Wis.—The Case Hardware Co. has been incorporated with a capital stock of $10,000.

Fairmount, Minn.—The Cory & Schellinger Hardware Co. has been incorporated with a capital stock of $25,000.

Tacoma, Wash.—O'Connor Brothers will open a hardware store on Union Avenue.

McClosky, N. D.—E. Tapley has opened up a hardware business.

Kansas, Ill.—C. W. and L. S. Phipps have engaged in the hardware business.

Yutan, Neb.—August Ohmstedt has opened up a hardware store.

BUSINESS CHANGES.

Sigel, Ill.—Olmstead & Bigler have purchased the hardware business of H. Place of Mattoon.

Corning, Iowa.—Frank Reinemund has purchased the hardware stock of F. Ockey.

Indianapolis, Ind.—The Mertz-Neumann Co. will in future be known as the J. Neumann Hardware Co.

Prattville, Mich.—B. B. Bricker has sold his stock of hardware to Herman Tuttle.

Akron, O.—The Hardware and Supply Company has purchased the hardware stock of Rohrbacher & Allen.

Girard, O.—The Girard Hardware Co. has absorbed the G. C. Davis Farmers' Supply Co.

Emington, Ill.—C. F. Skinner has sold his hardware store.

Ness City, Kan.—The Thompson Hardware Co. has succeeded to the hardware business of Thompson & Son.

Solomon, Kan.—William Sterett has purchased the hardware stock of Havener Bros.

Livingston, Wis.—T. O. Gundlach has succeeded to the hardware business of Gundlach & Mueller.

Oswego, Ill.—Charles Schultz has bought out the hardware business of Miller Bros.

Prairie City,, N. Y.—A. L. Jared has succeeded to the business of Jared & Chambers.

Beacon, Iowa.—A. S. Bloedel Co. succeeds Bloedel & Lewis, hardware dealers.

Freewater, Ore.—A. J. Bicknell has disposed of his hardware business to T. F. Kendall of Walla Walla, Wash.

Hartford, Mich.—J. H. Conrad of Whitehall, Mich., has

Minonk, Ill.—Geo. Hindert has purchased the interest of his brother, Joseph, in the hardware and implement business of Hindert Bros.

Council Bluffs, Ia.—Squire & Annis have purchased the hardware stock of E. O. Goodlaxson.

Yankton, S. D.—J. W. Dunn has purchased the hardware stock of Helon Cone.

MISCELLANEOUS.

New York Mills, Minn.—The hardware store of A. J. Sitz was recently burglarized.

Hillsdale, Mich.—The hardware store of George F. Gardner was burglarized.

Quanah, Tex.—The hardware store of Lewis & Sanders suffered a loss by fire of $30,000.

Granton, Wis.—The Knorr-Rausch Hardware Store was burglarized.

Leonard, N. D.—The hardware store of A. L. Porter was destroyed by fire.

Gotebo, Okla.—The hardware store of O. H. Minton & Bro. was damaged by fire.

Macon, Ga.—The hardware store of C. Huhn was destroyed by fire.

Massillon, O.—The hardware store of S. A. Conrad and Co. was burglarized.

Muskegon, Mich.—The Towner Hardware Co. has completed a new warehouse.

Advertising Department

Our readers are invited to send in copies of their advertisements in the local press for criticism. All communications should be addressed to the "Advertising Department" of THE AMERICAN ARTISAN.

Henneberg & Besanceney in their advertisement announce special prices on refrigerators and go-carts.

Special Prices on

Refrigerators and Go-Carts

REFRIGERATORS—Made of hard wood, thoroughly lined with charcoal, the interior lined with heavy galvanized iron. See our full line before you buy.

GO-CARTS—We have the latest style of collapsible carts made. It has an all steel frame and steel wheels with large rubber tires. Prices from ..... **$7.50 Up**

Henneberg & Besanceney

N. Fourth St. Opp. Masonic Temple.

They state the minimum price at which they offer their go-carts but fail to put a price on their refrigerators, for reasons probably best known to themselves. It would have been better had they not put a price on their go-carts since they have not deemed it necessary or advisable to do the same thing with their refrigerators. A person reading the first line of the ad would naturally expect to see prices placed on both of these commodities rather than on one of them only. The ad is well laid out, however, and presents an attractive appearance in many respects. It appeared in a recent issue of the *Zanesville* (Ohio) *Times-Recorder*, and occupied 5 inches of space, two columns wide.

* * *

Business can go without advertising—so can a wagon without greasing; but in both instances it goes hard.

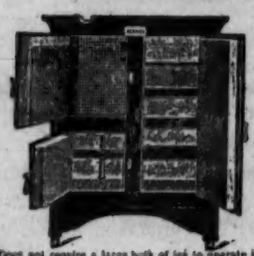
* * *

Herrick refrigerators and Direct Action ranges are given special attention in the advertisement of Thompson Bros. Co. of Muscatine, Iowa, who are local agents for these goods. The advertisement is an excellent one for many reasons. The text shows evidence of careful preparation, and is written in clear, convincing English. The meritorious features of the refrigerators and ranges advertised are set forth in such a manner as to attract the attention of the reader. The matter is well laid out and the cuts are arranged in a commendable way. The compositor in setting up the ad could scarcely have selected more suitable type, especially for the display lines. There is sufficient white space inside the border to make the ad stand out well, so that it may be read without difficulty. It appeared in a recent issue of the *Muscatine* (Iowa) *News-Tribune* and occupied 9¼ inches of space, five columns wide.

Two Things to Think About as Hot Weather Approaches

The Herrick Refrigerator

White Odorless Spruce Lined, White Enamel Lined and Opal Glass Lined



Why is the Herrick Refrigerator any better than the ordinary Refrigerator?

It is honest in construction throughout, and exactly as represented.

Has a perfect system of circulation.

Is always dry, pure and clean inside.

No mould No taint

Butter, cream, milk, lard, etc., stored at same time with meats, berries, fruits and vegetables, and even cheese, without taint or contamination.

Being perfect in system of refrigeration, there are no conflicting warm and cold air currents to cause dampness, and consequent mould, taint and odor, making it necessary to use poisonous zinc or metal linings.

Does not require a large bulk of ice to operate it, and consequently no wastage of ice and money.

The room usually required for the excess supply of ice to operate the other system is utilized in the "Herrick" for storage space.

The "Herrick" is honestly constructed. All walls and doors are packed to the full thickness with heavy insulation, making them very economical in ice consumption.

In the purchase of a refrigerator, you cannot see the insulation but after the refrigerator is put to use you can tell something about the merits of reliable goods. You must have proper insulation to give results, and save ice. Note the heavy walls and doors of "Herricks," which are packed full of insulation; not wind

Herrick Refrigerators are built of solid oak and are mortised and tenoned. You never will a Herrick go to pieces. All doors overlapping. No waste room or dark, inaccessible corners. Best of construction throughout.

The Herrick Pans are seamless. Never leak Heavy galvanized iron No rust.

Superior style of trap. Removable for cleaning.

Trimmings heavy brass composition. Nickel Plated. Very Durable.

Do not try to save a few dollars in first cost by using an inferior article

If you wish a perfect working refrigerator—one which will give results and save your money on perishable articles, and prove highly satisfactory in all respects—order the Herrick.

Best Construction. Perfect Circulation. Excellent Insulation. No Mould. No Taint. Highly Sanitary. "Quality is the Measure of Value."

The Direct Action Gas Range

The Great Gas Saver

Direct Action Ranges are made in many styles and to meet every requirement.

Every step in their improvement has been taken with an eye to economy in consumption of fuel. The system of oven heating in Direct Action Ranges had never been approached for economy in operation or excelled in the quality of the work. The Direct Action oven will turn out, ready to eat, a batch of biscuits while the oven in any other range is being made hot.

Direct Action ranges have no flue walls to generate moisture and rust out.

In no other range are the burners and ovens so conveniently located.

The Direct Action gas range is best because—

It does not heat oven when you broil or toast

It does not heat broiler when you bake or toast.

Broiler fire in plain view when broiling or toasting.

Oven fire in plain view when baking or roasting

All the valves have regulating orifice for the gas pressure

Burner caps not cemented, but loose, easy to clean

In a direct Action Range seven feet of gas will finish biscuits on both racks. This includes heating oven and baking.

Do You Know What This Means?

It simply means this. It is necessary with every other gas range to heat the oven for 15 to 20 minutes before baking to put in. Oven burners consume from 30 to 50 feet per hour—so that to heat the oven it takes from 10 to 12 feet of gas. This means to get the oven in shape for baking.

In our range with a consumption of 7 feet of gas you can finish biscuits on both racks. There is only one range can do this and that is the Direct Action Gas Range.

THOMPSON BROS. CO., AGENTS.

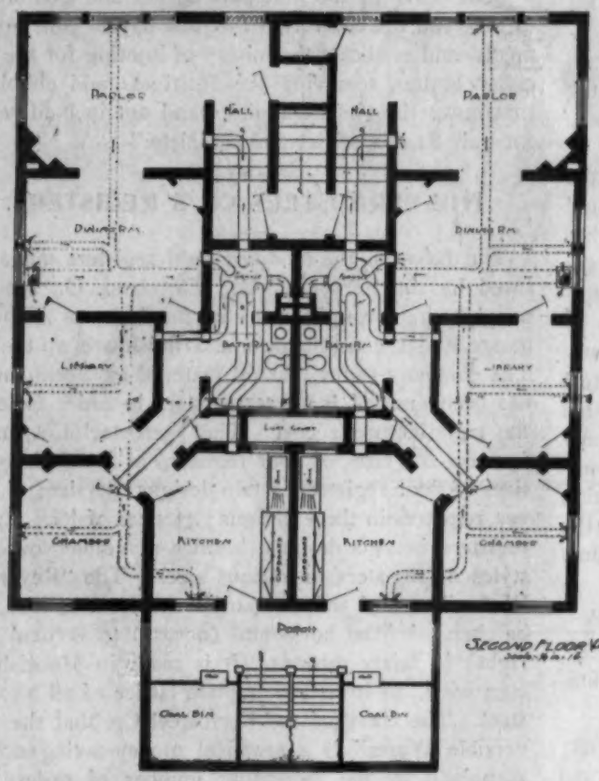
Heating and Ventilating

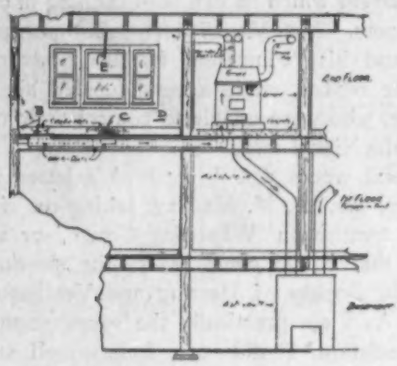
SOME PRACTICAL OBSERVATIONS ON HEATING.

BY JOHN F. HALE.

The following paper was prepared by Mr. John F. Hale, vice-president of the Consolidated Engineering Company, Chicago, for presentation at the semi-annual meeting of the American Society of Heating and Ventilating Engineers, held at Niagara Falls, N. Y., on July 24 and 25:

Several years ago I lived in a two-story frame flat building where the furnace heating system was constructed on similar lines to the one described by Mr. R. S. Thompson, and for my own satisfaction I took many observations of the temperatures, etc. These were described at one of the meetings of the Illinois chapter last year, but no complete record has been made of the same.





The building contained four flats, two on each floor, and although there was a good basement the furnaces had been placed within the several apartments more for convenience than for any other reason.

By referring to the illustration the arrangement of the second floor will be seen, and it will be observed that a special furnace room was provided as near the center of the flat as possible. This room had a cement floor, the walls, ceiling and door being lined with galvanized iron.

A 14x16 fresh-air or recirculating register was provided with a damper that enabled the occupant of the room to control the air to a certain extent; circulation was maintained through ducts run beneath the floor and connecting with 4x12 registers set into the baseboard, shown in the sectional elevation. These ducts connected with the fresh-air duct to the furnace.

The hot-air flues running from the top of the furnace in the usual way were suspended just beneath the ceiling, and passed through the hall and passage-way unconspicuously, so that they were not at all objectionable.

Registers were above the picture molding and as near the ceiling as possible, resulting in the necessity for redecorating the ceiling at least once a year.

REGISTER AND HOT-AIR PIPES.

Hot-Air Pipes. Inches.	Register. Inches.	Cubic Contents.	Room.
10	12x15	1,754	Parlor and front hall
10	12x15	1,040	Dining room
9	11x13	820	Library
9	11x13	820	Chamber
9	11x13	980	Kitchen
8	10x12	350	Bath room

Note—Contents of inner hall added to surrounding rooms.

Coal was kept in a two-ton bin located on the rear porch, and had to be carried through the kitchen, inner hall, and bath room twice a day, as there was no storage space in the furnace room. This, however, was not a serious matter, as but one bucket was needed each trip. An ash chute was provided, leading to a cement vault in the basement and it avoided the necessity of handling the ashes except to open the chute once each day. It is true that up drafts frequently carried the dust into the house, but this could have been put up with if that had been the only drawback.

In mild weather we had no trouble in keeping comfortable, but when the temperature would fall to the zero point, or when the wind would blow in our direction, it was impossible to keep comfortable. It was always found necessary to keep the temperature at point "E" (of a thermometer hanging from the electric fixture in the center of the room) above 80 degrees, in order to keep the floor temperature comfortable, or say about 65 degrees, there always being a difference of about 17 degrees between these points.

COMPARATIVE TEMPERATURES.

Date.	A	B	C	D	E	Wind.
Dec. 9, 1906.....	35	65	60	67	82	Variable
Dec. 16, 1906.....	26	60	50	60	70	None
Feb. 3, 1907.....	—2	56	50	55	72	N. W.
Feb. 10, 1907.....	23	64	60	67	77	None
Average.....	10	64	47	54	64	

Although this arrangement of furnace pipes delivering the air overhead seems to be proper, on cold days one's feet were cold while other parts of the body were warm, and on

mild days when the feet were comfortable the head was overheated.

This particular apparatus was in use one winter with all four furnaces on the floor heated. Later on the owners had to place the first-story furnaces in the basement and run new hot-air pipes. The second-story apartments still have the overhead system. One is vacant and the tenants in the other contemplate moving before another winter. The furnace had a 36-inch firepot and the plant was installed in 1900.

HUMOROUS ADVERTISEMENT OF F. F. MAC NICHOL.

At a vaudeville entertainment held in connection with the summer meeting of the American Society of Heating and Ventilating Engineers at Niagara Falls, N. Y., on July 24, Mr. F. F. MacNichol of F. F. MacNichol & Co., heating contractors, Oshkosh, Wis., delivered a humorous talk in which he referred to an advertisement which he had been running in one of his local papers. Mr. MacNichol's talk was greatly enjoyed, and his "compound fracture" advertisement, which he recited, made a very decided hit with the audience, who were unable to control their risibles.

Mr. MacNichol said:

"Several weeks ago I received a letter from the secretary, Mr. W. M. Mackay, asking me if I would write a treatise on 'Whooping Cough,' or any other subject that would come before the meeting of the American Society of Heating and Ventilating Engineers. As I am practically the youngest member of the association, I did not feel myself sufficiently weaned, and so thought I would learn to walk before I began to talk. But when the committee came to me and asked me if I couldn't do something I made up my mind that I would read to you this evening a compound fracture of an advertisement and proposition that is published 'in all the leading almanacs of the world, as well as the Sunday *American*. I will now proceed with the task:

Oshkosh, Wis., June 30, 1908.

Announcement Extraordinary.

"To the generally unassuming, unsophisticated, automatic public:

"MacNichol is my name. I am located in the city of Oshkosh (it's not necessary to name the state, and I intend to stay there till I'm removed by the police). I am the sole proprietor and owner of the famous MacNichol Heating Plants, and all apparatus appertaining thereto, including my life insurance and a sewing machine. (By the way, my daughter runs the sewing machine part of the time, and me all the time.) I also handle all of the radiation with the help of my men, and promulgate all the contracts with the help of the traveling salesmen. My plants are now in constant use throughout the Fox River Valley and I am in receipt daily of numerous foreign orders, one of which is from the private secretary of Kaiser William the Forty-second, for special heating of the Weinerwurst, that is used so generally in the German Empire.

"The *modus operandi* of my non-corrodable cinder dissolver, double duplex, patented blow-off, automatic steam reservoirs, concealed flues, triplicate gauge heated dispensers, is minimized by the use of the cheapest coal, and has been known to drive the occupants of flats, hotels, school houses, senate chambers, depots, hospitals and insane asylums at times to the imagination that even as far north as Dawson City, Alaska, they were sojourning within a few miles of the equator, many of the people in that northern city going so far as to wear their Panama hats.

"The Government has also supplied the Peary expedition with one of my heat-producing apparatus, and Peary has made a bet with Hinky Dink of the 1st ward in Chicago that with his heat-producing powers he reaches the north pole without trouble or anything to eat.

"I will not take up any more of your valuable time, but will ask you to affix your signatures to this check for $4,400, which, you understand, is $4,300 below any of the inferior creations that we have to replace daily.

"The party of the first part agrees and guarantees to give you the comforts of a June day in your apartments, and eradicate the misery of hunting for the lost collar button, removing the frostiness and chilblains that make the goose pimples stand out in bold relief, for only $4,400, all set and complete."

THE FERROSTEEL CO.'S REGISTERS.

The faces on the modified steel registers manufactured by the Ferrosteel Co., Cleveland, O., are full weight, the wrought steel in the bottoms is heavy gauge and the mechanism and finish are up-to-date. The company states that no material or workmanship has been omitted in these registers in order to lessen the manufacturer's cost. The Ferrosteel Co. manufactures 168 sizes of floor registers in five designs; 84 sizes of floor registers in two designs; 37 sizes of convex registers in three designs; 43 sizes of lock asylum registers in two designs, besides a number of other styles of registers in various sizes. The "Reversible Wafer," one of the company's newest creations, can be changed from horizontal (across) to vertical (upright) in thirty seconds. It is made in Moorish design with cast-iron face or plain lattice of all wrought steel. The claim of the Ferrosteel Co. that the "Reversible Wafer" is a practical money-saving novelty is upheld by the increasing number of orders that the company is receiving for these registers. A catalogue and discount sheet will be furnished on application. When writing for it kindly mention THE AMERICAN ARTISAN.

PARAGRAPHS.

The Kauffman Heating & Engineering Co. of St. Louis, Mo., has been incorporated with a capital stock of $15,000 by Samuel Kauffman, S. T. Price and S. T. Price, Jr.

The American Radiator Co. announces that its business during the past few months shows considerable improvement over that of the earlier part of the year, between sixty and seventy per cent of the company's business for the fiscal year having been done during the second half. The aggregate of small orders is said to compare favorably with that of corresponding periods.

Tinshop

SMOKE STACK PATTERN.

FOR SMOKE STACK 18"x16" AT BASE WITH 12" ROUND PIPE AT TOP. STACK 25" HIGH.

To The American Artisan:

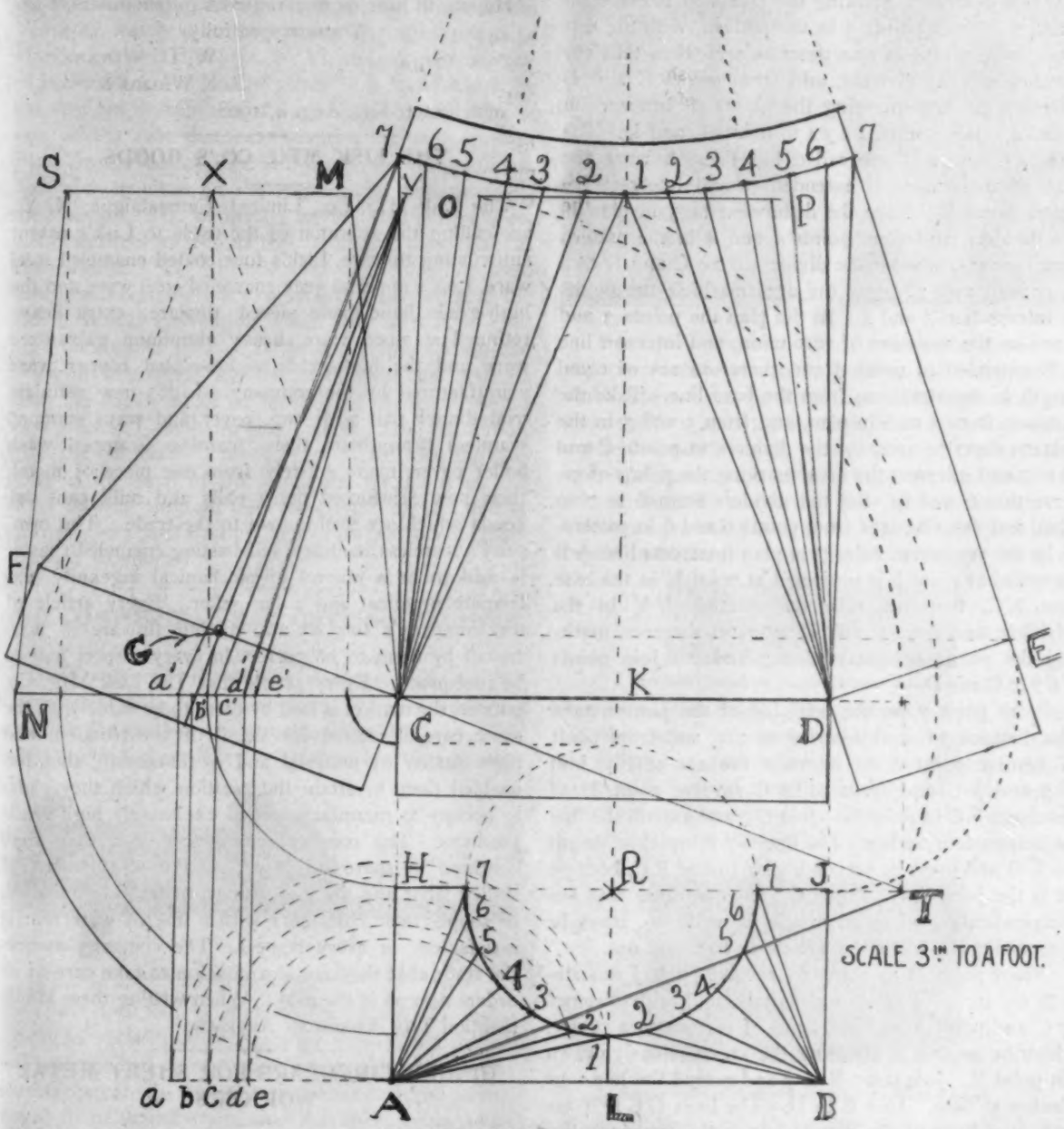
In reply to the recent request for a pattern in two pieces for a smoke stack, 18"x16" at base, 12" round pipe at top, and 25" high, the following is submitted:

Referring to the illustration A B C D is the plan of the base, 7 1 7 is the plan of top. The opening R is at the centre. The elevation of front is shown by C D at base and o p at top, 21 in. high. The side elevation is N C and S M.

In the plan draw the lines A R and B R. Divide the circle of top opening into equal parts from 1 to point 4. Set the dividers at A as a centre, and revolve each point, to meet line A B extended in points a c d e. The points 5 6 on side elevation of the top circle are found where the revolved arcs intersect the circle, and are spaced unequally.

Point 7 revolved intersects line A B, extended at point b. Those points a b c d e are projected to line N C, as a base line, and each point is drawn in an inclined position to point V, which is 21 inches from point C, and the line C V is perpendicular to the base line N C. Before proceeding to lay out the pattern, I will explain the "Principles of the operations performed."

Those radial lines extending from point A at base, to circle of the top opening, are to be considered as bases of right angled triangles; each triangle having a common altitude C V, each inclined line, from base line N C to point V is the hypothenuse of a triangle, and each inclined line is shown in its true length, extending from point A at the base to the points 1 2 3 4 5 6 7 at the top opening, 21 inches above the base line C D.



Smoke Stack Pattern Development.

How to lay out the pattern. The slant length from L to 1 at plan is shown on side elevation from N to S, and is shown in the pattern from K to 1. Join points C and D to 1. The line C 1 is equal to the line a' V. Set the dividers from 1 to 2 in circle of base, and from point 1 in pattern, describe arcs on each side, then take the distance C' V in the dividers, and from points C and D intersect the arcs previously described, marking the points of intersection 2 and 2. From points 2 in the pattern, with the distance from 2 to 3 in plan describe arcs as before, then take the distance d' V in dividers, and from points C and D intersect the arcs just described, marking the points of intersection 3 and 3. From points 3 in the pattern, with the distance from 3 to 4 in plan describe arcs, then take the distance e' V in dividers, and from points C and D intersect the arcs marking the points of intersection 4 and 4. Join points, 1 2 3 4 to points C and D. The lines 4 C and 4 D are called hip lines, because the plan of those lines if extended, would intersect the centre point R. Take the distance 4 to 5 in plan in the dividers, and from points 4 and 4 in the pattern describe arcs, now set the dividers from C and D to 3 in pattern and intersect the arcs marking the points of intersection 5 and 5. In the plan the points 3 and 5 are on the same arc of revolution, and intersect line A B extended in point d and therefore are of equal length in the elevation, from the base line. Take the distance from 5 to 6 in plan, and from 5 and 5 in the pattern describe arcs, set the dividers at points C and D to 2 and intersect the arcs, marking the points of intersection 6 and 6. Set the dividers from 6 to 7 in plan, and describe arcs from points 6 and 6 in pattern.

In the revolution point 7 in plan intersects line A B extended at point b is projected at point b' in the base line N C, therefore take the distance b' V in the dividers, and from C and D intersect the arcs, marking the points of intersection 7 and 7. Join points 5 6 7 to C and D.

From point 7 on the left side of the pattern take the distance 7 C and describe an arc, and from point C revolve point A to intersect the arc at F. Join F 7 and F C and from point C revolve point H to intersect F C in point G. Join G 7 and extend the line at bottom four inches. The line G 7 is equal in length to C O and must be perpendicular to line F C, because it is the joint line. Principle; any two lines that are perpendicular, when an article is made up, must be perpendicular when the article is flattened out.

From point D as a centre, revolve point J describing an arc of a circle indefinitely, and with distance 7 C and point 7 on right hand of pattern as a centre, describe an arc, intersecting the arc previously drawn in point E. Join point E to 7 and extend the line four inches at base. Join E to D. The lines G C D E are the base lines of the pattern, draw the four-inch line to fit over the brick, and turn out a small flange, at the base. The lines G 7 and E 7 extended will meet in a centre point, to describe the curve at top of pattern. The lines C 4 and D 4 will meet in the same point if extended. The curved line from 7 1 to 7 shows one-half the pattern at top opening. The upper curve shows a two inch lap. The line C I is revolved to test the accuracy of locating point 7.

Joseph P. Coleman.

ROOF GUTTER MITERS AGAIN.

To The American Artisan:

Being very much interested in getting a pattern development for a roof gutter such as Mr. G. L. Gray of New York showed in The American Artisan of June 27, I might say that I cut a pattern for a roof gutter of the same profile for a half pitch roof, and when I formed the same true to profile or stay, instead of fitting the half pitch roof the miter did not fit the pitch of the roof but was the same as any other square return miter.

Hoping to hear more about roof gutter miters, I am

Yours respectfully,

W. H. Winans,

Roe, Winans & Scott.

Winchester, Ky., Aug. 4, 1908.

THE LISK MFG. CO.'S GOODS.

The Lisk Mfg. Co., Limited, Canandaigua, N. Y., are calling the attention of the trade to Lisk's patent anti-rusting tinware, Lisk's four-coated enameled steel ware, Lisk's imperial gray enameled steel ware and the high-grade hand-made pieced tinware, extra heavy retinned stamped ware, heavy aluminum galvanized ware and the high-grade nickel-plated copper ware manufactured by the company. Lisk's new seamless oval dinner pail with cup, cover and trays stamped seamless throughout, their seamless stamped wash boiler cover, made entirely from one piece of metal, their new reinforced dairy pails and milk cans are goods which are well-known to the trade. The company's seamless, sanitary, self-basting enameled roaster is said to be a marvel of mechanical ingenuity, extremely practical and a big seller. Every article of the company's line of anti-rusting tinware is warranted by them to be perfect in every respect and to be rust-proof. Every article that The Lisk Mfg. Co. puts on the market is said by them to be made with the same careful regard for detail of construction, and high quality of material and workmanship, that has enabled them to attain the position which they claim to occupy as manufacturers of exclusively high-grade products. The company announces that they shall continue to spare no pains, by the employment of skilled labor and the use of finest materials obtainable, to supply their customers with a line of ware that is satisfactory in every respect. The company assures the trade that they are in a position to take care of all orders now as in the past. When writing them kindly mention The American Artisan.

GINGER CIRCULARS FOR SHEET METAL WORKERS.

The following is circular No. 6 of a series of ten circulars that W. H. Barnard of Norfolk, Va., secretary of the National Association of Master Sheet Metal Workers, has sent out to local associations:

"The National Association of Master Sheet Metal Workers calls attention to the following facts:

"The journeyman gets the maximum pay and works eight hours per day. He attends the meetings of his union with faithful and religious regularity.

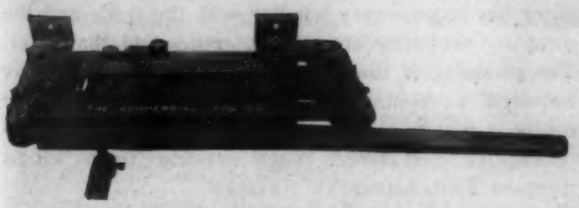
He gives freely of his income to support bountifully his union. His boss gets the minimum profits, if any. He works and worries sixteen hours per day. He does not attend the meetings of his local. He kicks because he is required to pay even a miserable pittance to support an organization which is in existence to help his business. Where do you stand?"

BROOKLYN MASTER SHEET METAL WORKERS.

The regular meeting of the Brooklyn local branch of the National Association of Master Sheet Metal Workers, was held on the evening of August 6th at 54 Hancock street, Brooklyn, N. Y., and was well attended. President W. H. Ostheimer in a letter which he has sent out to members of the association makes mention of the fact that examinations are still open at Pratt Institute, 215 Ryerson street, for the qualification of instructors in the tinsmithing department of the institute. Mr. Ostheimer advises that master sheet metal workers as well as their employes may take the examination. The president of the Brooklyn local says it will be their aim to send a full delegation to the fourth annual convention which will be held in Chicago on August 19-21. To quote President Ostheimer's own language, "The life of the National depends upon the life-blood of its locals, and the locals would soon decay if they did not receive their inspiration from the National. Therefore let us feel that the National is the heart of our locals and we the veins, the blood flowing through our veins typifying all that is patriotic, loyal and devoted to a cause inseparable from our very existence."

THE COMMERCIAL BAR CUTTING MACHINE.

The Commercial bar cutting machine, made by The Commercial Mfg. Co., Cleveland, O., is a powerful machine for cutting and punching bar iron and steel, small angles, channels, etc. This machine is made en-



The Commercial Bar Cutter.

tirely of steel and is said to be practically indestructible. It will cut bar iron or steel 3/8 x 3 inches, and will punch a 1/2-inch hole in 3/8-inch stock. The manufacturers say that only first-class material is employed in its manufacture, and that there is no possibility of it breaking down. The Commercial Mfg. Co. has acquired a reputation for making machines of absolute reliability, and they guarantee all their machines to perform efficient service. The company will be pleased to furnish further information concerning the construction and good qualities of the commercial bar cutting machine, and to quote prices. When writing them, kindly mention THE AMERICAN ARTISAN.

METAL WINDOWS UNDERGO SEVERE TEST.

The Consolidated Sheet Metal Works, 661-673 Hubbard St., Milwaukee, Wis., are sending out to the trade an attractive little booklet entitled "A Story of the Label," which tells of the severe tests to which their metal windows have been subjected at the Underwriters' Laboratories in Chicago, and how successfully the metal windows of this well-known firm stood the trying ordeal. As is well known, the Underwriters' Lab-

Fire Side Before Test.

Fire Side After Test.

oratories is an institution which has for its object the minimizing of the perils of fire. The tests that are made there of material used in building construction are carried on under the supervision of practical and experienced men whose knowledge of fire-proof devices makes them masters of their profession.

Before submitting their metal windows to the critical inspection of the experts at the Underwriters' Labora-

Window Label of Underwriters' Laboratories.

tories, the Consolidated Sheet Metal Works realized that they were fully prepared for the test, for they themselves had performed numerous experiments in the manufacture of metal windows that convinced them that their windows would receive the stamp of approval from the testing institution in Chicago. The

Underwriters' Laboratories' Fire-door Label.

surface of the windows of the Consolidated Sheet Metal Works averages 75 per cent of glass.

A window to be tested in the Underwriters' Laboratories is bricked into a section of a wall. This section of bricked wall is hung upon travelers, and in this condition it is pushed into the testing house. The wall containing the window divides the testing house into two parts, namely, the fire room and the observation room. In the fire room and opposite the window are

24 gas jets, each two inches in diameter. When the test is about to be made the gas jets are lighted and a sheet of flame is produced which is said to be as hot as the flames of a burning building. The window is subjected to this flame for a period of sixty minutes, the intensity of the heat being better comprehended when it is stated that in some instances the temperature exceeds 1,800 degrees Fahrenheit, which is almost enough to fuse the glass. At the end of the sixty minutes the whole section of the wall with the window is removed from the testing house into the open air, when a sixty-pound stream of water from a fire hose is immediately turned upon the heated metal and glass at a distance of approximately 20 feet.

The Underwriters' label is an absolute guarantee of merit, and the Consolidated Sheet Metal Works in having their metal windows pass the rigid test of the Underwriters' Laboratories, have every reason to feel sure that such an ordeal is the best guarantee of the fire-proof qualities of their windows.

DELEGATES TO THE CHICAGO CONVENTION.

Secretary W. H. Barnard of the National Association of Master Sheet Metal Workers, says that the following delegates will attend the National convention, which will be held at the Palmer House, Chicago, on August 19, 20 and 21. Mr. Barnard says that this is but a partial list, for numbers of others will attend the convention whose names he is not in possession of at this time: W. J. Shepherd and W. C. McGinly, Norfolk, Va.; R. R. Reeder, A. B. Weinland, John Lauck, Indianapolis, Ind.; Frank K. Whipple, Hartford, Conn.; Jas. H. Brown, Rochester, N. Y.; T. F. O'Herron, J. F. O'Connell, E. J. W. Jones, Terre Haute, Ind.; D. P. McGann, A. J. Kinnard, W. R. Hesser, Roanoke, Va.; J. H. Welch, Jos L. Gruber, Fort Wayne, Ind.; W. A. Fingles, C. D. Pruden, C. A. Hicks, Baltimore, Md.; E. S. Bortel, Chas. F. Geessler, B. F. John, Philadelphia, Pa.; Frank Hiller, J. V. Dailey, J. C. Callahan, E. F. Bohn, Cleveland, O.

NOTES AND QUERIES.

PORTABLE FURNACE TO DESTROY RUBBISH.

From The J. C. Orrick & Son Company, Cumberland, Md.

Can you give us the address of any one who manufactures a portable or semi-portable furnace or oven for the destruction and incineration of trash, such as waste paper, decayed vegetables, etc?

Ans.—Iowa Manufacturing Co., Oskaloosa, Iowa.

KITCHEN CHIMNEY VENTILATORS.

From Stebbins Hardware Co., 74 Van Buren St., Chicago, Ill.

Kindly give us the address of the manufacturers of the Ekstrom kitchen chimney ventilators.

Ans.—J. P. Ekstrom, Box 247, Berwyn, Ill. Tuttle & Bailey Mfg. Co., 211 Lake St., Chicago, Ill., also manufactures kitchen chimney ventilators.

HOUSE NUMBERS.

From Herman Von Blon, Upper Sandusky, Ohio.

Can you give me names of manufacturers of house numbers?

Ans.—Taylor & Boggis Foundry Co., Cleveland, Ohio; Reading Hardware Co., 105 Lake street, Chicago; Yale & Towne Manufacturing Co., 9 Murray street, New York City; Chicago Spring Butt Co., Chicago, Ill.; American Railway Supply Co., 24 Park place, New York.

STOVE PIPE ELBOWS.

From Sterling Hardware Co., 211 First Avenue, Sterling, Ill.

Will you kindly give me the address of the Lawrence Letts Elbow Company, manufacturers of stove pipe elbows?

Ans.—Waverly, New York.

SET OF POT LIDS WITH RACK.

From J. H. Dickson & Company, 33 N. Center St., Springfield, O.

Can you tell us who makes set of pot lids with rack?

Ans.—Butler Brothers, 7 W. Randolph St., Chicago.

ITEMS.

The members of the Master Sheet Metal Workers' Association of Syracuse, N. Y., were the guests of the Rochester association at the annual outing of the latter held on August 6. The event proved to be a very enjoyable one.

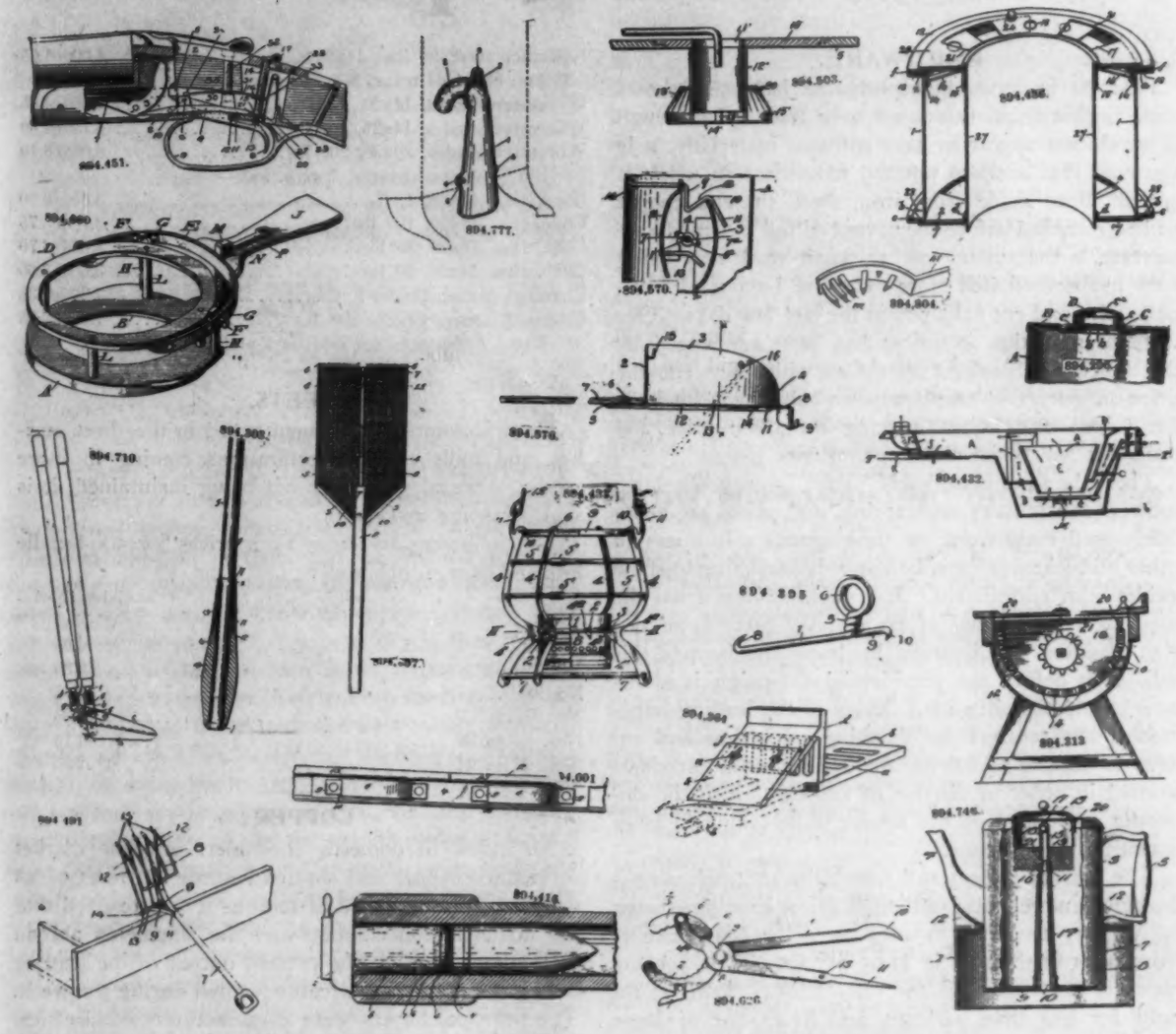
At the regular monthly meeting of the Master Sheet Metal Workers' Association of Milwaukee, which was held on August 5, the following delegates and alternates were elected to represent the Milwaukee local at the National convention which will be held in Chicago on August 19, 20 and 21: Delegates—Louis Hoffman, George P. Schmitt, E. B. Jonnsen; alternates—R. Jeske, August Klubertanz and Ernst Ferx.

"Mimco" solderless couplings, manufactured by the Modern Improvements Mfg. Co., 466-470 17th St., Brooklyn, N. Y., are said to be proving big sellers, due partly to the fact that they do away with wiping joints. The company says that orders for these couplings are coming in in greater numbers than ever. This is the best proof of the practical usefulness of "Mimco" couplings. A descriptive circular and price-list may be had upon application. When writing for it kindly mention THE AMERICAN ARTISAN.

The improved one-piece miter made by the J. E. Whiteacre Mfg. Co. of Rockford, Ill., manufacturers of sheet metal specialties, is, the makers say, made absolutely correct, and true to shape, size and bead. This miter has become very popular with the trade and the company says they are in greater demand than ever. The products of the J. E. Whiteacre Mfg. Co. have acquired a reputation for general reliability. The company will be pleased to quote prices and to furnish descriptive literature. When writing them kindly mention THE AMERICAN ARTISAN.

Friedley-Voshardt Co., 194-204 Mather street, Chicago, has purchased all the stamped zinc stock of architectural sheet metal ornaments of the Twinco Stamping Works of Rome, N. Y., and they are now able to furnish from stock most of the Twinco designs. The Twinco Stamping Works carried a very complete line of goods in moldings, rosettes, crestings, enrichments, brackets, leaves, garlands, etc., and Friedley-Voshardt Co. will be pleased to furnish the trade with full information and prices regarding Twinco goods. To the cornice trade who may not be already supplied with their 256-page catalogue of stamped and spun zinc work, Friedley-Voshardt Co. will gladly forward same on application. When writing them kindly mention THE AMERICAN ARTISAN.

NEW PATENTS.



894,296—Cap for Tin or Other Metal Cans. Eugene H. Taylor, Valdosta, Ga. Filed April 23, 1906. Serial No. 313,355.

894,303—Hand Tool. George E. Wood, Southington, Conn. Filed Aug. 28, 1907. Serial No. 390,499.

894,313—Flexible Washboard for Washing Machines. Clinton Case, Connersville, Ind. Filed Aug. 11, 1906. Serial No. 330,146. Renewed Jan. 29, 1908. Serial No. 413,269.

894,364—Stove. Octave Brizard, Holyoke, Mass. Filed Oct. 30, 1907. Serial No. 399,926.

894,395—Curtain Stretching Pin. George K. Reid, Minneapolis, Minn. Filed Feb. 19, 1908. Serial No. 416,724.

894,416—Means to Prevent Erosion in Guns. Barclay C. Winslow, Kansas City, Mo. Filed Nov. 12, 1907. Serial No. 401,829.

894,432—Cooking Stove and Range. Robert N. Grundy, Guelph, Ontario, Canada. Filed Feb. 6, 1907. Serial No. 356,115.

894,433—Lantern Frame. Alexander H. Handlan, Jr., St. Louis, Mo. Filed Jan. 27, 1908. Serial No. 412,771.

894,451—Single Trigger Mechanism for Guns. Ross F. MacMichael, Ben Avon, Pa. Filed May 28, 1907. Serial No. 376,122.

894,455—Stovepipe Thimble. William B. McLean, Hensall, Ontario, Canada. Filed March 30, 1907. Serial No. 365,592.

894,491—Pitchfork. John C. Frees, Ferry, Mich. Filed Aug. 9, 1907. Serial No. 387,860.

894,503—Stove Oil Burner. Floyd W. Horton, Ione, Cal. Filed Sept. 10, 1907. Serial No. 392,186.

894,570—Stove Damper. John Beahen and William M. Brown, Dixon, Ill. Filed Oct. 2, 1907. Serial No. 395,607.

894,576—Animal Trap. Mons M. Berg, Beardsley, Minn. Filed Nov. 16, 1907. Serial No. 402,445.

894,626—Fruit Jar Opener. Robert J. Givens, Enterprise, Idaho. Filed May 6, 1907. Serial No. 372,021.

894,660—Adjustable Support for Culinary Vessels. James J. Keen, Philadelphia, Pa. Filed April 2, 1908. Serial No. 424,703.

894,691—Nut or Bolt Lock. Benjamine E. Norris, near Bells, Tenn. Filed Oct. 5, 1907. Serial No. 396,072.

894,697—Insect Killer. Elmer E. Reynolds, Clinton, Ia; Addie Reynolds administratrix of said Elmer E. Reynolds, deceased. Filed March 16, 1908. Serial No. 421,518.

894,710—Garden Shears. Walter Selley, Manchester, England, assignor of one-half to Robert Lamb, Manchester, England. Filed Aug. 12, 1907. Serial No. 388,130.

894,746—Coffee Percolator. Howard W. Reynolds, New York, N. Y., assignor of one-fourth to Scott C. Ross, New York, N. Y. Filed Aug. 9, 1907. Serial No. 387,885.

894,777—Supplemental Downdraft for Stoves. Edward M. Hitchcock, Portland, Ore., assignor of one-half to H. R. Biersdorf, Multnomah county, Ore. Filed July 23, 1907. Serial No. 385,230.

894,804—Corn Cutter Knife. Albion W. Thomas, Rome, N. Y., assignor to the Burt Olney Canning Company, Oneida, N. Y. Filed Oct. 6, 1906. Serial No. 337,697.

Trade Report.

HARDWARE.

Business in most descriptions of hardware shows some improvement this week over last, and although prices do not appear to have stiffened materially, it is expected that a sharp upward movement in most, if not all, lines made from iron, steel, tin and copper will be recorded before the advent of fall. A moderate increase in the amount of car repair work now being done has necessitated more extensive buying of bolts, nuts, wire and cut nails within the last few days. One material reduction in prices has been announced by the American Steel & Wire Co., which has cut the price on extra B B telephone wire half a cent from the list issued on May 1, making the basic price 4⅜ cents for No. 6 size Birmingham wire gauge.

There is an unmistakably better inquiry for lawn mowers for delivery next spring, and prices are being fairly well maintained on these goods. Business in other mid-summer lines, however, is beginning to show evidence of curtailment. Favorable advices from the crop-growing sections of the country carry assurance that business will improve by leaps and bounds this fall, even before the presidential campaign is eliminated from the situation. Many of the leading hardware manufacturers are devoting more time and energy to developing a better market for certain products abroad in order to dispose of supplies which the domestic consumers do not appear to be taking in large quantities at this time.

The market for cut and wire nails and barb wire is becoming more active, although prices have not shown as yet any tendency to advance. The base price of wire nails at the mill is $1.95 per keg. The jobbing price is $2 at the mill for full carloads, $2.10 at the mill for less than carloads and $2.40 out of store. The base price of cut nails at the mill is $1.80 per keg. The jobbing price is $1.85 for full carloads at the mill, $1.95 for less than carloads at the mill and $2.25 out of store.

In the Chicago market wire nails are quoted at $2.13; painted barb wire, $2.28; galvanized barb wire, $2.58; smooth annealed wire, $1.98; smooth galvanized wire, $2.28; galvanized staples, $2.53; polished staples, $2.23. Quotations to retailers in car lots are 5 cents higher and in less than car lots 15 cents higher.

TIN PLATE.

The tin plate market is not exhibiting the same signs of activity that it has been for some weeks past, and new business for the month of August is expected to run somewhat light. The American Sheet & Tin Plate Company has closed about 80 of the 213 mills it was operating, but it is pointed out that in this line, as in others, opening of mills is reported several times when accumulation of orders is sufficient to insure a few days' running on full time.

Am. coke tins, I. C., from store, New York:

Bessemer steel, 107 lbs., 14x20	$4.35@4.40
Bessemer steel, 100 lbs., 14x20	4.20@4.25
Bessemer steel, 95 lbs., 14x20	4.10@4.15
Bessemer steel, 90 lbs., 14x20	4.00@4.05
Am. charcoal terne, 8-lb. coating—	
Worcester grades, 14x20, 17 lbs	4.30@4.35
Worcester grades, 14x20, 100 lbs	4.15@4.20
Worcester grades, 20x28, 200 lbs	8.05@8.10
For prompt shipment, f. o. b. mill—	
Coke, tins, 14x20, I. C	3.85@3.90
Coke, tins, 14x20, 100 lbs	3.70@3.75
Coke, tins, 14x20, 95 lbs	3.65@3.70
Coke, tins, 14x20, 90 lbs	3.60@3.65
Charcoal, terne, 20x28, I. C	7.30@7.35
Charcoal, terne, 20x28, 200 lbs	7.00@7.05

Usual differences for odd sizes and weight.

SHEETS.

There is some improvement noted in the sheet market, and mills report specifications coming in more freely. Official prices are not being maintained, it is said, by some makers.

The following are New York prices for 500-bundle lots and over, f. o. b. mill:

	—Galvanized— Net.
No. 30	4.05
No. 29	3.80
No. 28	3.65
No. 27	3.35
Nos. 25 to 26	3.15
Nos. 22 to 24	2.95

COPPER.

An influx of domestic consumers into the market for refined copper and sharp advances in prices of all grades, which followed as soon as it was realized that the domestic consumption and the shipments abroad were about equal to the present output of the leading mines, were the salient features noted during the week. The principal buyers were manufacturers of electrical equipment and wire drawers as well as makers of all kinds of brass products. The selling agent of the producers booked a good volume of orders for spot metal and for deliveries throughout the next two months. Most of these selling agents raised their prices on electrolytic metal from 12¾ cents to 13¼ cents, while they boosted their prices on the lake grade from 12⅞ cents to 13⅜ cents and their quotation on casting from 12½ cents to 13 cents.

It is announced that both the Western Electric and the General Electric companies have entered the copper market for the first time since the decline in the price of the metal below 26 cents. The Western Electric is an unusually large consumer of copper, since it furnishes most of the telephone supplies of the American Telephone and Telegraph Company.

As the revived demand shows no sign of falling off despite the sharp advances which have been made in all grades of the metal, it now is predicted freely on all sides that 14-cent and 15-cent copper will be noted before the advent of winter. The New York Metal Exchange quotation committee has raised its quotation on the electrolytic grade ¼ cent in the bid and ⅜ cent in the asked price. This committee also has advanced its quotation on lake and casting copper ¼ cent in

both bid and asked prices, bringing lake up to 13.37½ @13.62½, electrolytic to 13.25@13.50 and castings to 13@13.25. London prices were advanced ¼ cent.

Extreme fluctuations for the year:

	Highest.	Lowest.
Electrolytic copper, spot	13¾	12¼
Lake copper, spot	13⅞	12⅝
Casting copper, spot	13½	12⅛

SPELTER.

Spelter is higher and firmer in all markets, New York quoting 4.70@4.75 as to quantity. St. Louis quotes 4.62½. The Boston jobbing price is 5@5⅛ cents.

Extreme fluctuations for this year:

	Highest.	Lowest.
Spot, New York	$4.80	$4.30
Spot, London	£22 0 0	£18 0 0

PIG IRON.

A substantial increase is noted in the number of inquiries for pig iron, and a much firmer tone is being maintained among sellers. A feature which gives much satisfaction is that more of the inquiries are resulting in actual business, the tonnage of the past week having been of good aggregate volume. Another point of an encouraging nature is that the demand is more general; that is, all sections and both large and small concerns are looking for iron. Stocks in the hands of consumers are very small, in many cases none at all, and deliveries on contracts for this month are being made steadily in response to a growing urgency for prompt shipment. In the New England district there are in the neighborhood of 10,000 tons pending in four or five lots on inquiries made last week, and these will probably be closed in the immediate future. The majority of the sales now being made are for delivery in the last quarter of the current year, though some small lots are being moved for delivery this month. In some cases, where a furnace has a small lot of iron on hand, a slight concession may be made to a buyer, but those furnaces which are sold up are holding extremely firm on their asking prices. For deliveries after the first of 1909 the market is very firm, with furnaces unwilling to make any contracts except at an advance. Very little business for this period is yet reported. Not only is there more activity in the market, but prices are stronger and nearer the top range, though not actually advanced except in a few instances. The bulk of the recent business has been done at $12 f. o. b. Birmingham for Alabama iron, with some furnaces holding firmly for $12.50. Virginia iron is still very firm, but rather more quiet than other kinds at $18.25@18.50, delivered on the wharf at Boston, all rail costing 83 cents per ton more.

CHICAGO MARKET.

Lake Superior charcoal	$19.50@20.00
Northern foundry No. 1	17.50@18.00
Northern foundry No. 2	17.00@17.50
Northern foundry No. 3	16.50@17.00
Southern foundry No. 1	16.35@16.85
Southern foundry No. 2	15.85@16.35
Southern foundry No. 3	15.35@15.85
Southern foundry No. 4	14.85@15.35
Southern No. 1 soft	16.35@16.85
Southern No. 2 soft	15.85@16.35
Southern gray forge	14.60@15.10
Southern mottled	14.35@14.60

PITTSBURG MARKET.

No. 1 foundry	15.90@16.15
No. 2 foundry	15.40@15.65
Gray forge	14.90@15.15
Bessemer	16.40@16.65
Basic	15.90@16.40

BIRMINGHAM MARKET.

No. 1 foundry	12.50@13.00
No. 1 soft	12.50@13.00
No. 2 foundry	12.00
No. 2 soft	12.00
Gray forge	10.50

Matthew Addy & Co., Cincinnati, will say in their weekly report: "After the very large purchases of last month it is something of a surprise to find that buying is continuing at a fair rate. The July sales by the Southern furnaces were probably greater than was at first supposed. At least 35,000 tons were taken by two interests alone. The result of this free selling is that Southern iron is much firmer and prices have been advanced from fifty cents to a dollar a ton, and in the second place the quantity of Southern iron remaining free to sell has been much reduced. In fact there are several furnaces that temporarily are out of the market. The July sales were made near the bottom of the market. Prices were so attractive that buyers realized it would be difficult to go astray in purchasing. As yet there has been no change in Northern quotations, but the turn of the market is in favor of the furnaces on this side of Mason and Dixon's line and they have been doing considerable business.

"One noticeable thing is to be mentioned and that is the large reduction in the stocks of Southern iron. This tells in a striking way the story of the gradual resumption of activity in the iron trade. Slowly we are getting back to normal conditions. Some branches of trade are running nearly full, others are not doing so well, but all are better than was the case a few months ago.

"Coke is particularly active. The strike of the coal miners in Birmingham has resulted in the blowing in of coke ovens in other parts of the South to supply the Alabama shortage."

Rogers, Brown & Co., Cincinnati, will say in their weekly report: "The many indications of improvement which were evident a week ago and which made the market at that time the best so far this year, have been fully justified. Buying during the last few days has been freely indulged in. All districts have felt the impetus and have assisted in swelling the sales for the week. This total tonnage has been large. The West and Middle West have been leaders in the movement, which has not been confined but made up of both high and low grade iron and specialties. More than this, the bulk of buying has been for the first half of next year, with the result that some furnaces are in a more assured position regarding sales for the next six to nine months than they have been for over a year past.

"Practically all the inquiry out last week has resulted in sales of full tonnage inquired for, and buying has not been limited to any one line of consumers. Contracting has been done without any of the usual delay on the part of either furnace or consumer, as both seemed satisfied and the deals went through quickly.

"The best tone of the year is now prevailing and indications all point upward. Inquiry is active and there is a large tonnage being figured on for 1909. The market in all districts, as a result of this activity, is firmer. There is a decrease in the tendency to make prices on extended delivery business. Consumption is on the increase and all iron bought for immediate shipment or for use within the next month or six weeks is figured as going directly into the melt.

"Coke is active, contracting has been increasing and, while no large tonnages are in evidence, a small run of foundry business keeps up well."

Current Hardware and Metal Prices.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly.

METALS.

FIRST QUALITY BRIGHT PLATES.

		Per Box.
IC	14x20	$6 40
IX	14x20	7 45
IXX	14x20	8 60
IXXX	14x20	9 85
IXXXX	14x20	11 00
IC	20x28	13 70
IX	20x28	15 70
IXX	20x28	18 15
IXXX	20x28	20 55
IXXXX	20x28	22 95

COKE PLATES.

Cokes, 180 lbs	IC	20x28	$ 8 5
Cokes, 200 lbs	IC	20x28	9 00
Cokes, 216 lbs	IC	20x28	9 50
Cokes, 270 lbs	IX	20x28	11 25

PIG IRON.

North'n Fdy., No. 1	$17 50@$18 00
North'n Fdy., No. 2	17 00@ 17 50
North'n Fdy., No. 3	16 50@ 17 00
Southern Fdy., No. 1	16 35@ 16 85
Southern Fdy., No. 2	15 85@ 16 35
Southern Fdy., No. 3	15 35@ 16 85
Southern Fdy., No. 4	14 85@ 15 35
Southern No. 1 Soft	16 35@ 16 85
Southern No. 2 Soft	15 85@ 16 35
Southern Gray Forge	14 35@ 14 85
Southern Mottled	15 10@ 15 60
Lake Sup. Charcoal	19 50@ 20 00
Southern Silveries, 4% Silicon	17 55@ 18 35
Southern Silveries, 5% Silicon	18 35@ 18 85
Southern Silveries, 6% Silicon	19 35@ 19 85
Jackson Co. Silveries, 6 per cent	19 90@ 20 40
Jackson Co. Silveries, 8 per cent	20 90@ 21 40
Jackson Co. Silveries, 10 per cent	21 90@ 22 40
Malleable Bessemer	17 00@ 17 50
Standard Bessemer	18 25@ 18 75
Alabama Basic	16 35@ 16 85

BLACK STEEL SHEETS.

No. 12 per 100 lbs.	$2 20@$2 30
No. 14 per 100 lbs.	2 25@ 2 35
No. 16 per 100 lbs.	2 35@ 2 45
Nos. 18-20 per 100 lbs.	2 60@ 2 65
Nos. 22-24 per 100 lbs.	2 65@ 2 70
No. 26 per 100 lbs.	2 70@ 2 75
No 27 per 100 lbs.	2 75@ 2 80
No 28 per 100 lbs.	2 85@ 2 95

GALVANIZED

No. 10 per 100 lbs.	$3 05@$3 10
Nos. 12-14 per 100 lbs.	3 05@ 3 10
No. 16 per 100 lbs.	3 05@ 3 10
Nos. 17-21 per 100 lbs.	3 15@ 3 25
Nos. 22-24 per 100 lbs.	3 30@ 3 35
No. 26 per 100 lbs.	3 50@ 3 55
No. 27 per 100 lbs.	3 70@ 3 75
No. 28 per 100 lbs.	3 90@ 4 00

POLISHED SHEET STEEL.

No. 24 per 100 lbs	$4 90
No. 26 per 100 lbs.	5 00
No. 27 per 100 lbs.	5 10
No. 28 per 100 lbs.	5 20

SMOOTH STEEL.

Wood's Smooth, No. 20	$3 05
" " No. 22-24	3 10
" " No. 25-26	3 15
" " No. 27	3 20
" " No. 28	3 30

PATENT PLANISHED SHEET IRON.

Patent Planished Sheet Iron, "A" $10.20, "B" $9 20

PATENT PLANISHED SHEET STEEL.

Dickey Planished Sheet Steel 8½c

SOLDER.

XXX Guaranteed ½ & ½ per lb.	18 c
Commercial ½ & ½ per lb.	17½c
No. 1 Plumbers	15½c

SHEET ZINC.

500 lb. Casks case, per cwt.	$7 15
300 lb. Casks per cwt.	7 15
Sheets per cwt.	7 15

COPPER.

Copper sheet, 100 lbs. over, base 17c

TIN PIGS AND BARS.

Banca, pigs, per lb.	29 c
Straights, pigs, per lb.	29 c
Straights in bars, per lb.	33 c

LEAD.

American Pig	4 c
Bar	4 c
National (White) brands (in less than 100 lb lots), per lb.	8½c
Sheet.	
Full coils per 100 lbs.	$9 00
Cut coils per 100 lbs.	9 50

HARDWARE.

ADZES.

Carpenters'.	
Plumbs	40%
Coopers'.	
Barton's	20%
White's	15%
Railroad	
Plumbs	40%
Ship.	
Plumbs	40%
White's	12½%

AMMUNITION.

Caps, Percussion—per 1,000.

F. L Waterproof, 1-10s	40c
G D	35c
Musket	60c

Shells, Loaded—	
Loaded with Black Powder	40%
Loaded with Smokeless Powder, medium grade	40 & 5%
Loaded with Smokeless Powder, high grade	40 & 10 & 10%
Union Metallic Cartridge Co.:	
New Club, Black Powders	40%
Nitro Club, Smokeless Powders,	40 & 5%
Arrow, Smokeless Powders	40 & 10 & 10%
Winchester:	
Smokeless Repeater Grade	40 & 5%
Smokeless Leader Grade	40&10&10%
Black Powder	40%
Gun Wads—per 1,000.	
Winchester Gun Wads	15%

Powder.	Each.
DuPont's Sporting, kegs	$ 50
" " ½ kegs	2 50
" " ¼ kegs	1 40
Dupont's Sm'k'less. 50-lb. drum	22 45
" " 25-lb. kegs	11 30
" " 12½-lb. kegs	5 80
" " 6¼-lb. kegs	2 97
" 1-lb. cans	15

Shot.	
Drop shot, sizes smaller than B, 25-lb. bags, per bag	1 95
Drop shot, B and larger sizes, per 25-lb. bags, per bag	2 30
Buck Shot, 25-lb. bags, per bag	2 30
Chilled Shot, 25-lb. bags "	2 30

ANCHORS

Expansion Screw Anchors 10%

ANVILS

Trenton, 70 to 80 lbs.	9½c per lb
Trenton, 81 to 150 lbs.	9½c per lb

ASBESTOS.

Board and Paper 33⅓%

AUGURS.

Boring Machine	70%
Irwin's	40&10%
Carpenter's Nut	70%
Hollow.	
Bonney's—list $30.00	75&5%
Stearns, No. 3	36 00
Post Hole.	
Digwell, 8-inch per doz.	12 50
Iwan's Post Hole and Well	40%
Vaughan's, 4 to 9-in., per doz.	6 25
Rafting.	
Snell's	50&5%
Ship.	
Ford's, with or wi'out screw	40-12½%
Snell's " " "	40-5%

AWLS.

Brad.	
No. 3 Handled per doz.	$0 40
No. 1050 Handled "	80
Shouldered, assorted, 1 to 4, per gro.	$1 20
Patent asst'd, 1 to 4 "	85
Harness.	
Common "	95
Patent "	90
Peg.	
Shouldered "	1 20
Patent "	60
Scratch.	
No 1 handled "	4 80
No. 15, socket handled per doz.	1 25
No. 7 Stanley	1 80
Sewing.	
Common per gro.	90
Patent "	90

AXES.

Boy's Handled.	
Lippincott, 3 lb. per doz.	$6 00
Falls City "	6 00
Broad.	
Plumbs, West, Pat	33⅓%
" Can. Pat	40%
" Firemen's (handled) per doz	$1, 75
Plumbs, Miners' (handled) "	6 75
Single Bitted (handled)	
Gladiator . 3 to 4 lbs . per doz	$11 00
Flint Edge " " "	9 25
Standard " " "	9 25
Elec Chopper, Forest Clipper	10 50
Perfect Premier " "	10 00
Crown " "	7 00
Single Bitted (without handles)	
Gladiator 3 to 4 lbs. per doz.	$8 50
Flint Edge. " "	7 00
Standard " "	7 00
Electric Chopper " "	8 25
Perfect " "	7 75
Crown " "	6 25
Double Bitted (without handles).	
Gladiator 3 to 4 lbs. per doz.	11 50
Flint Edge. " "	9 75
Perfect " "	11 00

The above prices on axes of 3 to 4 lbs. are the base prices.

3½ to 4½ lbs. advance 25c
4 to 4½ lbs. advance 50c.
4½ to 5½ lbs. advance 75c.

BAGS, PAPER NAIL.

Pounds	10	16	20	25
Per 1,000	$2.50	3.75	4.50	5.00

BALANCES, SPRING.

Frary's	40%
Pelouze	20%

BARS, CROW.

Pinch or Wedge Point per cwt. $3 75

BASKETS.

Clothes.	
Small Willow per doz.	$7 00
Medium " "	8 75
Large " "	10 50

Galvanized Iron.	½ bu.	1 bu.	1½ bu.
Per doz.	$4 75	6 50	8 00

BEATERS.

Carpet.	per doz.
No. 10 Coppered Spring Wire	$0 90
No. 12 Spring Wire	1 10
No. 10 Preston	1 10
Egg.	Per doz.
No. 50 Imp. Dover	$0 75
No. 102 " " tinned	35
No. 150 " " hotel	1 40
No. 10 Heavy hotel tinned	2 10
No. 12 " " "	3 30
No. 15 " " "	3 60
No. 18 " " "	4 50

BELLOWS.

Blacksmiths'	65%
Hand.	
8-inch per doz.	$8 50
10-inch "	10 50
Moulders'.	
12-inch "	12 50

BELLS.

Call.	
3-inch Nickeled Rotary Bell, Bronzed base per doz.	$5 00
Cow.	
High Grade	60%
Kentucky	65&10%
Door.	Per doz.
New Departure Automatic	$6 00
Rotary.	
3 -in. Old Copper Bell	4 00
3 -in. Old Copper Bell, fancy	6 00
3 -in. Nickeled Steel Bell	4 50
3½-in. Nickeled Steel Bell	5 00
Hand.	
Hand Bells, polished	50&5%
White Metal	40%
Nickel Plated	30%
Swiss	40&33⅓%
Silver Chime	33⅓%
Miscellaneous.	
Church and School, steel alloy	50%

Farm, lbs	40	50	75	100
Each	$1.25	1.60	2.35	2.85

BEVELS, TEE

Stanley's, rosewood handle, new list	25%
Stanley's iron handle	25%

BINDING, OILCLOTH.

Zinc	80%
Brass	70&10%
Brass plated	75&5%

BITS.

Auger.	
Extra Double Spur	70&10%
Ford's Car and Machine	40&10%
Triumph	50&5%
Ford's Ship	40&10%
Irwin	50%
Russell Jenning's	25&10%
Clark's Expansive	60%
Steer's " Small list, $22.00	25%
" " Large " $26.00	25%
Irwin Car	45%
Ford's Ship Auger pattern Car	40&10%
Center	40&10%
Countersink.	
No. 18 Wheeler's per doz.	$1 25
No. 20 " "	1 75
American Snail head	75
" Rose "	90
" Flat	75
Mayhew's Flat	1 25
" Snail	1 25
Dowell	
New Jennings	40&10%
Gimlet.	
Standard Double Cut	60%
German Pattern per doz.	$0 60
German "	65
Gouge "	80
Spoon "	80
Countersink "	1 00
Reamer.	
Jenning's Square "	2 50
Standard Square "	75
German Octagon "	75
Screw Driver.	
No. 7 Common "	50
No. 1 Triumph "	1 25
No. 2 " "	1 —
No. 340 Shepardson's "	—
No. 1 Smith's "	—

BLACKING, STOVE. (See Polish).

BLADES, SAW.

Butchers'.
Standard, ⅞ & 1¼-in.....40%
Clock Spring.....40%
Star.....15%
Coil.....each, $1 50
Hack.
Disston's.....25&5%
Flexible.....33⅓&5%
Star.....20&5%
Wood.
Jackson's.....per doz. $2 25
Disston's—No. 6, 16, 26 & 045.. 4 25
Triumph..... 3 50
Forest Clipper..... 3 00

BLOCKS.

Snatch.
Wooden.....60&10%
Steel.....50%
Tackle.
Iron Strapped.....70%
Com. Steel.....60%

BOARDS. (New List)

Stove.....50&10%
Wash.
Globe, single.....per doz. $2 50
Globe, double..... " 3 35
Peace Maker..... " 3 00
Crystal Glass..... " 4 00
Brass King..... " 4 00
Nickel Plate..... " 4 15

BOBS, PLUMB.

Carpenters'.
No. 2, iron.....per doz. $0 65
No. 00, " ..... " 1 30
No. 0, " ..... " 1 80
No. 3, lead..... " 2 90
No. 4, " ..... " 3 40
No. 113, brass plated.. " 1 10
No. N30, nickel plat'd. " 1 30
No. N31, " " " 1 85

BOLTS.

Carriage, Machine, etc.
Carriage, ⅜x6 and sizes smaller and shorter.....70&10%
Carriage, sizes larger and longer than ⅜x6.....60&5%
Machine, ⅜x4 add sizes smaller and shorter.....70&10%
Machine, sizes larger and longer than ⅜x4x4.....60&5%
Elevator.....50-10&5%
Plow.....60&10%
Stove .....80&10%
Tire.....75%
Wagon Box Strap.....70%
Mortis, Door.
Gem, iron.....60%
Gem, bronze plated.....20%
Barrel.
Cast.....60%
Wrought.....
Wrought, bronzed.....50%
Flush.
Wrought .....50&10%
Spring.
Wrought.....
Wrought, heavy.....
Square.
Cast.....50&10%
Wrought.....

BORERS.

Angular.
Miller's Falls.....per doz. $13 00
Bung.
Dos.
Enterprise Mfg. Co 's No 1... $14 00
" " " No 2.. 18 50

BOXES

Mail, No..... 1 2 10
Per doz.....$3.50 5.00 17.50
Miter.
New Langdon.....15&5%
Stanley's.....30%
Seavey's.....each, $1 50

BRACES.

Barber's ..... 50&10&10@50&10&15%
Fray's Genuine Spofford's.....60%
" Nos. 66 to 146.....50%
" No. 0108..... $3 50
" No. 06..... 2 75
" No. 010..... 2 85

BRACKETS.

Hay-Rack.
Wenselmann's No. 1, per doz. $9 00
" No. 2, " 9 60
Shelf.
Cast Iron, bronzed.....50-10&5%
Clover Wrought Steel.....70&10%
Clover Folding 70%

BROILERS.

Wire..... 70%
No. Cwron, Self-basting, 50doz .. $3 50

BUCKETS.

Pump, Rubber.
Wychoff.....per gro. $4 75
Cooper..... " 4 75
Champion..... " 7 50
Victor..... " 9 25
Star..... " 5 00
IXL..... " 6 75
Well.
Galv'd Qts..... 10 12 14
Per doz.....$2.90 $3.25 $3.40
Wooden, top ear, plain, per doz. 4 00
" " swivel, " 5 10

BUCKS, SAW.

Folding.....per doz. $2 10

BURRS, RIVETING.

Copper Burrs only.....30%
Tinners' Iron Burrs only.....65&5%

BUTTS.

Cast Iron.....70&5%.
Wrought Brass (New List).....40%
Wrought Steel, Bright.
Wrought Steel, Japanned.
Nos. 731 and - .....70&10%

CALIPERS.

Double.....65&5%
Inside and Outside.....65&5%
Wing.....70%

CALKS.

Logger's Boot.
(Lufkin R. Co.'s), per M..... $3 75
Toe.
Shoenberger.....per lb 5 c
Bessemer..... " 4½c
American..... " 7 c
Swedes..... " 8½c

CANS.

Cheese Factory.
Ontario Pattern.
Gallons..... 20 30 40
Each..... $4.25 $5.00 $6.25
Milk.
Holstein.
Nos..... 300 301 302
Gals..... 5 8 10
Per doz.....$26.00 $27.00 $29.00
Chicago Pattern.
Nos..... 105 108 110
Per doz.....$19.00 $21.50 $23.00
Iowa Pattern.
Nos..... 406 410
Per doz..... $23.50 $24.50
New Elgin Pattern.
Nos 705 708 710
Per doz.....$25.00 $37.00 $28.00
Burn Pattern
Nos..... 700 701
Gals..... 8 10
Price..... $2.40 $2.65

CAN OPENERS.

See Openers.

CAPS, GUN.

See Ammunition.

CARPET STRETCHERS.

See Stretchers.

CARRIERS.

Hay.
Diamond, Regular.....each, $3 85
Diamond, Sling..... " 6 50
Myers' Imperial ..... " 3 85
Myers' Clover Leaf..... " 4 00

CARTRIDGES.

See Ammunition.

CASTERS.

Standard—Ball Bearing.....50&10%
Bed.....60&5%
Common Plate.
Brass Wheel.....60&10%
Iron and porcelain wheels, new list.....60&5%
Philadelphia Plate, new list.....70%
Martin's.....60%
Payson's.....75&10%

CATCHERS, GRASS.

Carroll's, No. C.....per doz. $4 25
Wildermuth's,.
Nos..... 1 2 3
Per doz.....$5.00 $5.75 $6.25
Nos..... 4 5 6
Per doz.....$6.75 $9.50 $10.00

CHAIN AND CHAINS.

Breast Chains.
Doubleslack.....doz. pairs, $5 75
With Covert Snaps. " 5 00
With Slide..... " 3 25
Without Slide..... " 2 85
Bright Ox Chains.
½-in. $7.25; ⅝-in. $5.45 per 100 lbs.

Cable Coil Chain.
Inch..... 7/16 ½ 9/16 ⅝
Per 100 lbs.$10.80 $8.00 $7.00 $6.20
Inch..... 7/16 ½ ⅝ ¾
Per 100 lbs.$6.00 $5.90 $5.75 $5.65
Inch..... ¾ 1 1¼
Per 100 lbs.....$5.55 $5.55 $5.65
Cable Log Chain.
Advance 25c per 100 lb. on Cable Coil.
Cow Tie Chains.
American, 2 toggle.....50&5%
" toggle and snap...50&5%
" open and closed ring.....50&5%
Halter Chains.
American, new list.....33⅓%
German.....60%
Niagara, new list 40%
Brown's, " 40%
Picture Chains.
Light Brass, 3 ft.....per doz. $0 65
Heavy Brass, 3 ft .... " 1 00
Pump Chain
Galvanized, per 100 lbs.....$5 50
Safety Chain.
Brass.....60%
Special Steel Loading Chain.
Inch..... ½ 9/16 5/8
Per 100 lbs.....$16.00 $13.50 $12.50
Stretcher Chains.
5/16-in. $8.50; ⅜-in. $7.75 per 100 lbs.
Tie-Out Chains.
Brown's.....70&5%
Trace Chains.
Western Standard.
6½— 6-2.....per pair 30c
6½— 8-2..... " 34c
6½— 8-3..... " 33c
6½—10-2..... " 38c
7 — 8-2..... " 38c
7 —10-2..... " 42c
7 —10-1..... " 48c
7 —10-0..... " 60c
Add 2c per pair for Hooks.
Add 2c " for Twist Link.
Wagon Stay Chains.
Inch..... ½ 9/16 ⅝
Per 100 lbs.....$6.50 $6.00 $5.50

CHALK, CARPENTERS'.

Blue.....per gro. 75c
Red..... " 65c
White..... " 55c
Common White School Crayon..... " 8c

CHARCOAL.

In bags..... per bag 90c

CHECKS, DOOR.

Blount.....33⅓%
Sargent's.....33⅓%

CHIMNEY TOPS.

Iwan's Volcano.....50%

CHISELS.

Box.
Inches..... 10 12 14
Round per doz....$2.10 $2.25 $2.75
Flat " ... 2.85 3.60 4.20
Cold.
Good quality, ⅝ in. and larger.....per lb. .12c
Smaller size per doz.....
Socket, Framing and Firmer.
Clover.....75&10%
Tanged, Firmer.
With handles..... 30&5%
Choppers, See *Cutters, Meat.*

CHUCKS, DRILL.

Goodell's, for Goodell's Screw Drivers.....per doz. $6 25
Yankee, for Yankee Screw Drivers..... 5 00

CHURNS.

Anti-Bent Wood,
Gal..... 5 7 10
Each.....$3.90 $4.60 $4.85
Belle, Barrel.....65&7½%
Common Dash, Gal. 4 5 6
Per doz..... $7.75 $8.50 $10.50
Union, Gal..... 5 7 10
Each.....$3.65 $3.90 $4.75

CLAMPS.

Adjustable.
Martin's.....30%
Carpenters'.
Steel Bar.....25%
Hose.
Sherman's, brass, ½-in., per doz.. 42c
Double, brass, ½-in., " 90c
Saw Filers.
Disston's list, $30.00.....30%
Stearns', No. 0, $3.50; No. 1, $11.50; No. 3, $5.00 doz.
Wentworth's, No. 1, $6.00; No. 3 $7.50.

CLAWS, TACK.

Cast, wood hdle..... per doz.45@60c
Forged steel, wood hdle " $0.80
Solid steel..... " 1 00
Giant..... " 50

CLEANERS.

Drain.
Iwan's Adjustable.....55%
Iwan's Stationary.....40&5%
Pot.
Wire.....per doz. $0 55
Side-Walk.
Steel.....per doz. $3 25
XLCR .....65&5%

CLEAVERS

Family.
Griffin, Inch..... 6 7 8
Per doz.....$5.50 $5.75 $6.25
Royal.....per doz. 2 25
Butchers.
Plumbs.....25%

CLEVISES

Malleable.....5½c lb.

CLIPPERS.

Bolt.....$1.90@4.75

CLIPS.

Axle.....65&5%
Damper.
Standard.....per doz. 65c
Troy..... " 38c
Hame..... " 17

CLOTH.

Emery.
Star.....50%
B. & A.....50%
Hardware Wire—full rolls (100 ft.)
2 to 3 incl., Galv.—in full roll... 2 75
4 and 5..... " .. 3 00
6..... " .. 3 25
7 and 8..... " .. 3 75
Screen Wire.
12 mesh, painted, per 100 sq. ft.. 1 35

COCKS AND FAUCETS.

Compression Plain Bibbs...60, 10&5%
Lever Bibb Cocks.....60, 10&5%
Compression Hose Bibbs..50—10&5%
Telegraph Faucets (new list)..50—5%
Racking Cocks (new list)...60, 10&5%
Compression Lock C'ks(new list).70%
Andrew's Brass Faucets.....70%
Angle Plug Faucets, per doz....$0 85
Milk Can Faucets, per doz..$2.60-4.20
Petroleum Faucets .....75&5%

COLLARS, STOVE PIPE.

Inches..... 5 6 7
Plain Tin..per gro.$1.90 $2.40 $3.50
Japanned Tin " 3.00 3.60 4.25
Lacquered Brass" 3.00 5.50 4.25

COMBS, CURRY.

Nos... 000 11 15 39 89 108
Per Doz..$.37 .60 1.90 .90 1.15 .80
Nos... 299 320 390 522 620 1400
Per Doz.$1.05 .85 1.35 1.20 .75 1.40

COMPASSES.

Carpenters'.....60—10—10%
Pencil—Faber's.....per doz. $1.00

COPPER—See Metals.

COPPERS.

Soldering.
1 lb.....per lb 30c
1½ lb.....31c 2 lb... " 29c
3 lb and larger..... " 26c

CORD.

Picture
White Wire (new list) .....85&10%
Sash.
Monarch Braided Flax...per lb
Silver Lake, white, 7-32 in. "
Silver Lake, white, 8-32 in. "
Keystone.....8-32 in. " 29c

CORKSCREWS.

Humason & Beckley.....33⅓%
Walker's.....33⅓%
Williamson's Regular.....40&10%
Williamson's Forged Worm.....50%

COTTERS, SPRING.

All sizes—new list.....90&20%

COUPLINGS, HOSE.

Brass.....per doz. $
Brass Plated..... " 85

COVERS, WAGON—See Tents.

CRADLES, GRAIN.

Morgan's Grapevine....per doz.$[illegible]

CRAYONS—See Chalk.

CROW BARS.

Inch or Wedge Point.....per lb 3½c

CUTTERS.

Glass.
Red Devil.....45%
Smith & Hemenway Co.....50%
Woodward.....40%
Meat.
Enterprise, Nos. 5, 10, 12, 22, 32 and 42.....25%
No. 202, list, $1.50 ea.....40&7½%
Pipe.
Stanwoods.No.... 1 2 3
Each.....$0.85 $1.50 $4.00
Slaw and Crout.
3-knife Crout.....per doz. $9 75
1-knife Slaw..... " 1 65
2-knife Slaw..... " 2 25
Washer..... " 7 75

DAMPERS, STOVE PIPE.

Jewel.....50&10%
American.....50%

DIES AND STOCKS.

Discount.....40%
King's, Little Giant.....33⅓%

DIGGERS.

Post Hole.
Acme.....per doz. $9 25
Atlas..... " 9 00
Eureka..... " 7 50
Hercules..... " 10 25
Iwan's Split Handle.. " 7 50
Iwan's Perfection.... " 9 00
Iwan's Hercules pattern " 10 00
Ryan's..... " 17 00
See also Augers—Post Hole.
Dividers, Wing.....65&10%

DOOR CHECKS—See Door.

DOORS, SCREEN.

⅞ in. 4-panel, painted...per doz. $7 93
1⅛ in. 4-panel, painted... " 9 50
1⅛ in. 3-panel, natural pine, fancy..... " 12 40

DOOR HANGERS—See Hangers.

DRILLS.

Bit Stock.....60&10%
Blacksmith's Twist.....60%
Breast.
Fray's No. 9.....each, $1 75
Millers Falls No. 12..... " 2 10
Hand.
Goodell's Automatic.
Nos..... 01 03 3 29
Per doz.. $7.75 $12 50 $12.50 $11.00
Goodell's Single Gear, per doz. 15 75
Millers' Falls " " " 12 75
" " Double " " 15 25
Reciprocating.
Goodell's.....per doz. 16 50
Bit Stock.
Standard List..60&5%@40%@10

DRIVERS, SCREW.

Standard.....65&10%
Lock Ferrule.....40%
Champion.....40&10%
Champion Pattern.....70%
Clark's Interchangeable.....30%
Edison.....60%
Reed's Lightning.....45&5%
Goodell's Spiral.....50, 10, 5&2½%
Yankee Ratchet.....50%
" " Spiral.....50&10%
Smith & Hemenway Co.....40&5%

EAVES TROUGH, GALVANIZED.

Terms, 2% for cash. Factory shipments generally delivered.

See also conductor pipe and elbows.

EGG BEATERS—See Beaters.

ELBOWS.

Adjustable Stove.
Inches..... 5 6 7
Smooth, per doz...$0.75 $0.85 $1.20
Plan'd, " 1.80 2.00 2.65
Corrugated Conductor.
Discount.....75&10%
Corrugated Stove.
Inches..... 5 6 7
Smooth, per doz..$0.8' $1.00 $1.50
Pol'd, " .. 1.40 1.65 2.35
Plan'd, " .. 2.15 2.65 3.40
Four-Piece Stove.
Inches..... 5 6 7
Smooth, per doz..$0.60 $0.65 $0.95
Planished, " .. 1.40 1 70 2.30

EMERY CLOTH—See Cloth.

EMERY TURKISH.

Size.....5-lb. pkgs. ½ kegs, kegs.
No 60 to 150, per lb.. 6c 4c 4c
Flour..... " ... 5c 3c 3c

ENAMEL, IRON.

A-B Iron Enamel, 3 doz. case, ...per gro., 15 00
Peerless..... 1 25

EXTRACTORS, PIG.

See Forceps, Pig

EYES.

Bright Wire Screw—See Goods, B. W.
Drifting Pick.....60, 10&5%
Hooks and—
Brass.....50&10%
Iron.....70%

FASTENERS, STORM SASH.

Schroeder's.....per doz. $0.85
Sensible..... " 1 15

FAUCETS—See Cocks.

FILES AND RASPS.

Delta.....70&10%
Kearney & Foot.....75&10%

FLUE STOPPERS—See Stoppers.

FORCEPS, PIG.

Superio.....per doz. $4 75
Whisson's Imp..... " 5 25

FORKS.

These goods are sold net this year.
Barley.
Steel New List.....65&10%
Wood, 4-tines, per doz.....$5 00
Coal, Coke, Cottonseed.....30%
Hay.
2-tine.....60%
3 " .....60&5%
4 " .....60&10%
Digging.....65&5%
Scoop.....30%
Header.
3-tine.....60&5%
4 " .....60&5%
Manure.
4-tine.....60%
Ore.....40%
Spading.

FRAMES.

Hack Saw.
Union.....per doz. $5 75
Jenning's adj..... " 7 50
Cast..... " 2 50

FREEZERS, ICE CREAM.

Arctic.
Qts..... 1 2 3 4 6
Each...$1.10 1.30 1.50 1.80 2 30
Qts..... 8 10 12 15
Each.....$2.95 3.80 4.50 5.20

GAUGES

Butt and Rabbet.
Cream Pail.
Fairmont.....per doz. $3 75
Marking, Mortise, etc.....
.....50&10%
Saw.
Wire.
Disston's.....25%

GIMLETS.

Discount.....35@40%

GLASS, WINDOW.

Single..... 90&20%
Double.....90&25%

GLASSES, LEVEL.

GLUE.

Bulk.
B Amber.....per lb. 12 c
A White..... " 15 c
H. S. Amber..... " 16½c
Liquid.
Army & Navy.....40%
Le Page's—
List "A".....37½%
List "B".....33⅓%
List "C".....25%

GOODS.

Bright Wire.....90%

GREASE, AXLE.

Wood Boxes.
Diamond.....per gro. $5 50
Frazer's..... 9 50
Hub Lightning..... 5 25
Paragon..... 6 75
Wood Pails.
Frazer's, 15 lb. 80c; 25 lb. $1.30 each.
Hub Lightning, 15 lb. 55c; 25 lb. 70c each.
Tin Cans.
Chamellene Graphite.
1 lb. per gross.....$9 50
3 lb. per gross.....25 00
5 lb. per gross.....37 00

GRIDDLES.

Soapstone.....33⅓%

GRINDSTONES.

Family.
Inches..... 7 8 9
Per doz.....$8.25 9.00 10.50
Loose.
Per ton.....$20 00@$21 00
Mounted.
Ball Bearing..... 1 2 3
Each.....$3.15 3.00 2.85
Common Bearing 1 2 3
Each.....$3.00 2.80 2.65

GUN WADS

(See Ammunition.)

HAFTS, AWL.

Brad.
Common.....per doz. $0 19
Peg.
Common..... " 22
Patent, plain top..... " 47
Patent, leather top... " 52
Sewing.
Common..... " 22
Patent..... " 52

HALTERS.

Jute Rope.....per doz. $1 10
Sisal Rope..... " 1 85
Web..... " 2 00
Leather, rope tie..... " 8 50
Leather, leather tie..... " 11 50

HAMMERS, HANDLED.

Blacksmiths' Hand.
Plumbs.....60&5%
Engineers'.
Plumbs.....60&5%
Farriers'.
Plumbs.....40&10%
Machinists'.
Plumbs.....60&5%
Nail.
Plumbs.....40&7½%
Quaker City.....per doz. $3 50
Cast..... " 1 15
Maydole's.....30&5%
Riveting.
Plumbs.....40&12½%
Shoe.
Cast.....per doz. $0 75
Tack.
All Iron.....per doz. $0 35
Pol'd Iron, Hickory hdl. " 50
Mall. Iron, Inlaid..... " 1 55
Magnetic..... 1 2 3
Per doz.....$0.70 .80 1.00
Magazine.. .....per doz. 4 75

HAMMERS, HEAVY.

Heavy Hammers and Sledges.
Under 5 lbs .....30&5%
5 lbs. and over.....30&10%
Masons'.
Single and Double Face.....30&5%

HANDLES.

Auger.
Common Assorted....per doz. $0 38
Peck's Adjustable.... " 2 10
Ives' Adjustable.....per set, 1 35
Axe.....60%
Chisel.
Hickory, Tanged Firmer, Assorted, 33c; Large, 38c per doz.
Hickory, Socket Firmer, Assorted, 27c; Large, 30c per doz.
Applewood, Tanged, Firmer, Assorted, 29c; Large, 38c per doz.
Applewood, Socket, Firmer, Assorted .....per doz $0 24
Coal Pick.....50&10%
Drifting Pick.....50&10%
File, assorted, 13c; Large, 16c per doz.
Hammer.
Adze Eye.....per doz. $0 40
Blacksmiths'..... " 40c@70c
Machinists'..... " 45c@70c
Hatchet..... " 40
Hay and Manure Fork.....30%
Hoe and Rake.....30%
Plain.....per doz. $0 75
Varnished..... " 80
Screw Driver.
Assorted..... " 37
Large..... " 48
Shovel and Spade.....33⅓%

HANGERS.

Barn Door.
Nansen.....60&10%
Matchless.....70&10%
Storm King.....60%
World's Best.....50%
Wagner's Adjustable.....70&10%
Warehouse.....60%
Conductor P.
Griffin.....70&10%
Iwan's Perfection.....50%
Eave Trough.
Baker's.....per gro. $2 35
Imperial.....20%
Wire.....33⅓%
Parlor Door.
Acme.....per set, $3.75
Ives' Improved..... " 2 50
Lane's Standard..... " 3 50
Lane's New Model.... " 3 10
Le Roy Noiseless..... " 4 00
Richards'.....40-10&5%

HASPS.

Hinge, Wrought.....40%
With Staples—See Staples.

HATCHETS.

Crown.....60-10&5%
Cast Claw.....per doz. $1 10@1 35
Cast Shingling.... " $0 85@1 10
Germantown.....30%

HAY KNIVES.

See Knives.

HAY RACK BRACKETS.

Wenzleman's No. 1.....per doz. $9 00
Wenzleman's No. 2..... " 9 00

HINGES.

Blind.
Clark's Gravity ... per doz. sets, 95c
Parker's.....65%
Shepherd's Noiseless, for Wood Casing.....per doz $1 05
Gate.
Clark's..... 1 2 3
Hgs & Latch..doz. $2.50 2.90 4.00
Hinges only... " 1.90 2.20
Latches only . " .70 .75
Knuckle.....per doz prs. $6 00
Leed's..... " sets 6 75
Superior..... " prs. 9 50
Spring.
American.....20%
Chicago.....25&5%
Columbia Dbl. Acting....40&10&5%
Gem.....25%
Ideal Detachable.....per gro. $11
Matchless.....30%
New Idea.....per gro. $8 00
Oxford.....20%
Wrought Iron
New Lists .....
McKinney
Light Strap Hinges.....60%
Heavy Strap Hinges.....65%
Light T Hinges.....55%
Heavy T Hinges.....45%
Extra Heavy T Hinges.....60%
Screw Hook and Strap.
6 to 12 in.....per 100 lbs. $3 75
14 to 20 in..... " " 3 65
22 to 36 in..... " " 3 40
Screw Hook and Eye.
½ in.....per 100 lbs. $6 75
⅜ in..... " " 7 75
½ in..... " " 9 75

HOES

Garden .....70&10%
Grub.
Extra.....70%
Hazel.....per doz. $5 00
Ladies' and Boys'.....75%
Mortar.....75&10%
Planter's Eye.....62½%
Weed.....75&15%

HOLLOW WARE—See Ware.

HOOKS.

And Eyes.
Brass.....50&10%
Iron.....65&10%
Awning.....per gro. $1 00
Belt.
Brown's.....70&5%
Jones'.....65&5%
Bench.
See Stops, Bench.

Box.
Inch..... 6 8 10 12
Per doz.....$1.35 1.65 1.75 2.30
Humason & Beckley's..per doz. $2 50
(See Goods, Bright Wire.)
Bush.
Common Axe Handle. per doz. $7 00
Chain.
Inch..... ½&⅝ ¾ 7/10 ⅞
Per 100...$7.60-8.10 9.75 11.50 12.60
Clothes Lines.
Japanned .....per doz 22c@24c
Galvanized..... " 40c
Coat and Hat
Cast Iron .... per gro. 72c@$1 50
Gem Wire.....70%
Conductor.
Malleable.....25%
Wrought.....20%
Corn.
Common, unpolished, per doz. $1 50
Little Giant..... " 3 25
Gate.
See Goods, Bright Wire.
Grass.
Common. Nos..... 2 3 1
Per doz.....$1.50 1.60 1.70
German.....per doz. 1 75
Little Giant..... " 2 75
Hammock.
With plate.....per doz. 50
With screw..... " 45
Lambrequin, or Drapery, per gro. .21c
Picture.....50%@50&10%
Potato and Manure.....70&12½%
Screw.
Brass.....80&5%
(See Goods, Bright Wire.)
Seat Spring .....per lb. 5½c

HOOPS, TUB.

Elastic ... per case of 2 doz.... $1 50

HOSE, GARDEN.

				Coupled, per ft.
Heron, 3 ply-½" guar. press			55 lbs.	7½c
Crane..	"	"	" 75 "	8½c
Falcon	"	"	" 95 "	9½c
Eagle	"	"	" 120 "	10½c
Condor	"	"	" 150 "	11½c
High Test	"	"	" 200 "	12½c

COTTON COV. RUBBER HOSE.

High Grade-½"-guar. press.			400 lbs.	11½
Special	"	"	" 300 "	9½c
Leader	"	"	" 100 "	7½c

HUSKERS.

Boss.
Nos..... B BB E 200
Per doz.....$2.00 2.00 1.75 .80
Nos..... L PP P K
Per gro.....$5.40 6.00 6.00 10.50
Nos..... 2000 3000 O
Per gro.....$3.50 9.00 24.50
Nos..... 60 59 64 68
Per doz.....$2.15 2.15 .85 1.45
Brinkerhoff's.
Per gro.....$14 40
Clark's.
No..... 1 63 200 400
Per doz.....$0.40 .75 .75 1.75
Nos..... 300s 40s 3s 4s
Per doz..... $0.85 .50 1.25 1.25
Nos..... A AB F
Per doz.....$3.00 $4.25 $2.50

IRON.

See Metals.—First column.

IRONS.

Curling.
X.....per doz. $0 40
Y..... " 50
Z..... " 58
Jewel..... " 85
Imperial..... " 1 00
Pinking..... " 70
Plane.
Wood Bench.....20&5%
Sad.
Charcoal.....per doz.$11 00
Common, polished, per 100 lb. 4 50
Common, nickel plated, 5 25
Chinese Polishing.....per doz. 7 40
Laundry, No. 1..... " 5 75
Laundry, No. 2..... " 6 25
Mrs. Pott's,
No. 50 J. Enterprise, per set 93
No. 55 J. " " 90
No. 50 T. " " 1 00
No. 55 T. " " 96
Tailors' Sad.....per lb. 5½
Tailors' Geese..... " 5½
Tuyere.
Single Duck Nest.....per doz $5 25
Double Duck Nest .. " 6 25
Sutton.....each.... 3 00

JACKS.

Locomotive.....70%
Wagon.
Oliver,
Nos..... 0 00
Each.....$0.60 $0.80
Standard.
Nos..... 1 2
Each.....$0.60 1.00
Wilcox.
Nos..... 1 2 3
Each..... $0.85 1.20 2.90

KETTLES.

Brass.....15%
Cauldron.....40&5%
Copper..... per lb., 27c
Maslin.....65%
Sugar.....50%

KNIVES.

Beet Topping.
Clyde, 9-in. Scimiter Blade, doz.$3 85
California..... 3 40
Cooper's Hoop.....15%
Corn.
Clipper.....per doz. $1 75
Disston's..... " 2 75
Earle's..... " 3 00
Woodford..... " 2 25
Drawing.
Standard.....70%
Adjustable.....15%
Barton's Carpenters' 10%
Folding Handle.....25&5%
Hay.
American, Sickle Edge...doz. $10 50
Canton, Sickle Edge..... " 8 25
Heath's..... " 8 00
Iwan's, Sickle Edge..... " 9 50
Iwan's, Impv'd Serrated . " 10 00
Lightn'g, Holt's Genuine. " 6 50
Lightning Pattern..... " 6 00
Wadsworth's Sp'r Point.. " 8 50
Hedge.
Challenge.....per doz. $6 00
Disston's..... " 3 75
Mincing.
Common, Single..... " 40
Common, Double..... " 50
Streeter, 4-Blade..... " 1 30
Streeter, 6-Blade..... " 2 00
Putty.
Common.....per doz. $0 60@1 00
Lander'r..... " 1 40@1 75
Scraping.
Beech Handle..... 75@1 00
Lander's..... 5 25@6 00

KNOBS.

Door.
Mineral.....per doz. $0 80
Porcelain..... " 90
Jet..... " 90

LADDERS.

Common Long.
Per ft.....9c@14c
Extension.
Per ft.....14c
Step.
Common, per ft.....7½c
Common, with Shelf, add 10c.
Keystone.....15c
Triumph, per ft.....20c

LANTERNS.

Bull's Eye Police.
3 -in. Flash Light....per doz. $6 00
2½-in. Regular..... " 4 90
3 -in. Regular..... " 5 50
Tubular.
Dietz & Hanes' . . ..net prices.

LEADERS, CATTLE.

Nos..... 1 2 3
Per doz..... $0 55 .70 2.75

LEATHER, LACE.

Cut.....33⅓%
Sides.
Ex. Quality ..... per sq. ft., 27

LEATHERS, PUMP.

Valve and Plunger.....10%

LIFTERS.

Stove Cover.
Coppered.....per gro. 1 75@3 65
Ideal..... " 5 50
Alaska, Coppered " 4 00
Alaska, Nickeled. " 5 00
Transom.
Payson's.....80%

LINES.

Chalk.
Twisted in 20-ft. hanks.
Nos.... 4 6 7 8 9
Gross...$1.50 2 00 2 25 2 50 3 00
Twisted in 50-ft. balls.
Nos..... 1 2 3 4
Per doz.....25c 30c 35c 41c
Braided in 20-ft. hanks.
Nos..... 0 1 2 3
Per doz.....22c 25c 31c 35c
Mansons', in 100-ft. hanks...doz. 80c
Clothes.
60-ft. Jute.....per doz. $0 95
72-ft. Jute..... " 1 15
60-ft. Sisal..... " 1 40
72-ft. Sisal..... " 2 15
50-ft. Cotton..... " 1 15
50-ft. Braided Cotton. " 25

LINING, STOVE.

In Bricks .....per crate. 42c

MACHINES.

		Without Augers	With Augers
Boring.			
Angular.....per doz.		3 00	4 40
Upright.....	"	2 60	4 00
Leather Riveting.			
Chicago, Pomeroy....per doz.		$0 00	
Excelsior.....	"	2 00	
Handy.....	"	2 00	
Little Giant.....	"	3 00	
Pony, Pomeroy.....	"	7 20	
Washing.			
Winner.....per doz.		54 00	
Keystone.....	"	54 00	
U. S. Steel.....	"	60 00	
Advance, f.o.b.Chicago	"	24 50	

MAIL BOXES.

See Boxes.

MALLETS.

Carpenters'.
Fibre Head, Small....per doz. $5 00
" " Medium. " 5 75
" " Large... " 7 00
Round Hickory..... " 2 25
" Lignumvitæ... " 4 00
Square Hickory..... " 2 25
" Lignumvitæ... " 4 50
Tinners'.
Applewood..... " 1 70
Hickory..... " 1.00@1 50
Hickory Sheet Iron... " 1 50

MATS

Door
National Rigid.....50, 10&5%
Acme Steel Flexible.....33⅓%
Stove.
No. 2.....per gro. $3 25
No. 1..... " 3 50
No. 1 Asbestos Toasters, or wire-covered Stove Mats, with handle.....per doz. 1 10
No. 2 Asbestos Toasters, with ring.....per doz. 60

MATTOCKS.

Plumbs.....65&10%
Extra.....60%

MAULS.

Iron, lbs..... 10 13 16 18
Per doz.... $4.00 4.50 5.25 5.60
Wood face, lbs..... 10 12 14
Per doz..... $5.00 5.50 6.00
Wood Choppers'.
Lake Super'r & Oregon Pat. 75&10%

MEASURES.

	½ pk.	1 pk.	bu.
Galvanized, per doz.	$2.25	3.00	3.85
Japanned.. "	1.75	2.45	3.15

MICA.

First Quality.....20%
Second Quality.....25%

MILLS, COFFEE.

Enterprise.....25%
Parker.....40-12½&2½%
Arcade.....40-12½&2½%

MITRE BOXES.

See Boxes.

MOPS.

Erie.....per doz. $3 15
Handled Cotton.
Pounds..... ¾ 1 1¼ 2
Per dozen....$2.00 2.25 2.65 3.25

MOWERS, LAWN.

Gladiator—B. B.
Inches..... 16 18 20
Each..... 6.50 7.25 8.00
King Universal—B. B.
Each..... 5.25 5.75 6.00
Inches..... 14 16 18
Big Giant..... 3.50 3.90 4.25
Little Giant..... 2.50 2.65 2.75
Philadelphia.
All Styles, except A & E, 60, 10&10%
Style A.....50&10%
Style E, High Wheel....60, 10&10%
Drexels.....40%
All Day .....Net Price

NAILS.

Cut Steel .....rates, $2 50
Cut Iron..... 2 60
Wire.
Small Lots..... $2 28
Carload Lots..... 2 18
Cement Coated..... 2 30
Horse Shoe.
Ausable.....55&5%
Capewell.....15%
Perfect.....55&5%
Putnam.....20&5%
Star.....35&5%
Clover Leaf..... per lb., net, 10½c
Picture.
Brass Heads.....25%
Brads.....85%
Furniture.....15%

NAIL PULLERS.

See Pullers.

NAIL SETS.

See Sets.

NETTING, POULTRY.

Galvanized beforeweaving .80,10&2½%
Galvanized after weaving.....80&7½%
Cut Pieces.....65&5%

NIPPERS.

End Cutting.
Stubb's Pattern. Inches 5½ 6
Per dozen..... $4.00 4.25
End and Diagonal Cutting.
Swedish Side.....75%
Utica Drop Forge & Tool Co....60%
Hoof.
Heller's.....40&10%
V. & B.....55&5%

NOZZLES.

Hose.
Genuine Gem.....per dos. $3 90
Magic..... " 3 60
Mystic..... " 3 00

NUTS, HOT PRESSED.

Square Blank.
In ¼ 5/16 ⅜ 7/16 ½ ⅝ ¾
lb 9½c 8c 6½c 5½c 5½c 5c 4½c
Square Tapped.
In. ¼ 5/16 ⅜ 7/16 ½ ⅝ ¾
lb. 12½c 10½c 8c 7½c 6½c 6½c 6c
For 5-lb. boxes add ½c per lb. to above prices.

OILERS.

Chase Pattern.
Brass and Copper.....60%
Zinc.....60%
Engineers'.
Cannon.....55%
Tin .....per doz. $2 00@$2 25
Machine.
Common.....per doz. $0 58
Copper Plated Steel... " 1 00
Malleable Iron.....60, 10&5%
Japanned.....65@75c

OPENERS.

Box.
Inches..... 10 12 14
Flat.....per doz. $2.85 3.60 4.15
Round.... " 2.10 2.25 2.75
Can.
Delmonico .....per doz $1 30
Never Slip..... " 65
Crate.
V. & B..... " 5 75

OUTFITS, COBBLING.

Combination.....per doz. 11 00
Economy..... " 4 65
Family..... " 9 75

PADLOCKS.

Standard Wrought.....75&5%
Champion.....50%
Eureka.....40, 10&5%
Yale.....60&5%

PAILS.

Cream.
14-qt , without gauge, per doz. $2 50
20-qt., " " " 3 00
20-qt., with gauge.... " 3 50
Sap.
10-qt., Galvanized, per 100....$13 00
12-qt., " " 14 50
14-qt., " " 16 25
16-qt., " " 17 75
10-qt.,IC Tin..... " 10 25
12-qt., " .... " 11 75
14-qt., " .... " 13 00
10-qt.,IX Tin.... " 12 75
12-qt., " .... " 16 00
14-qt., " .... " 17 00
Stock.
Galv'd, qts. 14 16 18 20
Per doz..... $3.75 4.00 4.75 5.25
Water.
Galvanised... qts. 10 12 14
Per doz..... $1.95 2.30 2.45
Wood.
Cable, 2-Hoop.....per doz. $1 70
Cable, 3-Hoop..... " 1 90
Cedar, 3-Hoop..... " 2 85
Standard, 2-Hoop.... " 1 60
Standard, 3-Hoop.... " 1 80

PANS

Dripping.....60&5%
Fry
Common .....75&10%
Acme 70%
Roasting.
Paxton,
Nos..... 1 2 3 4
Per doz.... $4.75 5.75 6.50 7.50
Neverburn .. 4.00 4.50 5.50 6.00
Savory, No. 290.....per doz. $8.00

PAPER.

Building.
Plain.....per 100 lbs. $1 25
Tarred..... " 1 35
Tarred Felt..... " 1 65
No. 20, Red Rosin....per roll, 40
No. 30, Red Rosin.... " 55
Sand and Emery.
Star ..... low list, 50%
B. & A.....50%
Wrapping.
Drab Fiber.....per lb. $0 00
Manila..... " 0 00

PARERS.

Apple.
Bay State.....per doz. $12 00
Turntable..... " 6 00
White Mountain..... " 5 00
Reading..... " 7 00
Potato.
Goodsell's Saratoga, 10½ in., doz. 6 50
Goodsell's Saratoga, 5 in., doz. 5 50

PICKS.

Adze Eye Ore.....70%
Drifting and Poll Picks.....70%
Plumbs, Railroad.....70%
Surface.....70%

PINCERS.

Carpenters', cast steel.

Inches.....	6	8	10	12
Per doz.....	$2.00	2.60	2.95	3.75

Blacksmiths'.....45%
Heller's.....40%

PINS.

Clothes.
Common.....per box of 5 gro $0 52
Hoyt's..... " " 31
U. S..... " " 70
Picket.
Fluted, 15-in.....per doz. $0 70
Fluted, 21-in..... " 1 60
Spiral..... " 1 90

PIPE.

Conductor.

	Gal. Steel	Charcoal
L. C. L. to Dealers:—		
Eastern	70&10%	50&10&2½%
Pittsburgh..	75&10&5%	60%
Central.....	75&10%	60%
Northwestern..	75&7½%	60%
Western	70&12½%	50&12½%
Tennessee	70&10%	50&12½%
Southern.....	70%	50&12½%
Southwestern	70%	50&5%

Terms 60 days; 2% Cash 10 days.
Factory shipments generally delivered.

Lead.
Full coils .....per lb. 7¼c
Cut coils..... " 7½c
Stove

Acme—Inches....	5	6	7
Smooth, per jt...	8½c	9½c	10½c
Planished, "	32 c	33 c	43 c
Peerless—Smooth,	7½c	8 c	9½c
Polished.....	14½c	15½c	18 c
Planished.....	28 c	31 c	35½c
Made-up—Inches..	5	6	7
Smooth.....	7½c	8 c	9½c

7 to 6 in. Smooth Tapers, pr jt...13c
6 in. Smooth T's..... " 27c
7 to 6 in. Planished Tapers.....45c
Yale Patent Lock Pipe—Stove.

Blue Steel:	5"	6"	7"	7" to 6"
	Cents			
Battle Axe Blue...	7	7½	9½	10½
Can't Slip " ..	7½	8½	10	11
Peerless " ..	7½	8½	10	11
Duplex " ..	10	11	13	14
Yale, Rus. Fin....	15	16	17	18
Duplex Planished.	29	31	37	38
Galvano, Gal.....	15	16	17	18

If wanted made up, add per joint or grooved, 1c; riveted, 1½c. Grating made-up pipe extra.
Wrought Iron Gas Pipe.
⅛@½-in., black.....discount, 60%
⅝@½-in., black..... " 60,10&5%
¾-in. to 6-in., black... " 70%
7-in. to 12-in., black... " 62½%
⅛@½-in., galvanized.... " 42%
⅝@½-in., galvanized.... " 50%
¾-in. to 6-in., galvan'd " 57½%
7-in. to 12-in., galvan'd " 45%

PLANES.

Sargent Iron Bench.....60%
Stanley Iron Bench .....25&5%

PLATES, TIN.

See Metals in Column 1.

PLIERS.

Button's—Ins.. 4½ 6 8 10
Per doz..... $2.75 3.35 4.15 5.15
Button's Pattern.

Inches.....	4½	6	8	10
Per doz.....	$2.25	2.75	3.25	4.25

Cutting.
Bernard's.....30%
Lodi.....50%
End and Diagonal Cutting
Swedish Side.....70%
Utica Drop Forge & Tool Co....50%
Fencing.
Farmers' Choice.....per doz. $8 00
Russell's..... " 8 25
Flat and Round Nose.
Bernard's.....30%
German.....65%
Lodi.....50%
Paragon.....50%
Gas.—Inches.. 7 8 10 12
Per doz..... $3.00 3.50 4.50 5.50

Tinners'.
Hollow.....40%
Solid.....each, 5½c

PLUMBS AND LEVELS

Common .....60&10&10%
Cook's.....40%
Davis' Iron 25%
Davis' Inclinometer.....15%

POINTS

Drive Well Points.....75&5%

POKERS, STOVE.

Wr't Steel, str't or bent, per doz. $0 55
Wr't Steel, wood hand'l " 80
Nickel Plated, coil hand'l " 65

POKES, ANIMAL.

Cracker Jack, wr't steel, per doz. $4 50

POLISH.

Metal.
A-B Oil Metal Polish, 4-oz. bottles, 3 doz. case, per gr. $0 00
1-gal. can..... 90
White Silk, half pints, per doz, $2 00
White Silk, 6-oz. cans, per doz. 1 00
Shoe.
M. C. D.....per doz.....36c@50c
F. C. O..... " 40c
T M..... " .55c@$1 75
Imperial.....per gro 5 00
Stove.
A-B Polishes.
Liquid Stove Polish.
3 doz. in case..... $2 25
6 " " .....gr., 9 00
Fireproof Stove Polish, 3 and 6 doz. in case.....gr., 12 00
Liquid Waterproof Stove Polish, 10-oz. cans, per gro., 12 00
Oil Paste Polish.
6-oz. cans, 3 doz. case..... 2 25
1-lb. " 3 " " 3 75
5-lb. " per can..... 50
Dry Powdered Stove Polish.
5-lb. box..... 75
100-lb. bbls.....per lb. 12
Powder Polish. 3 doz. 6 do. 12 doz.
$2.25 $4.50 $9 00
Water Paste Stove Polish, ¼-lb. boxes, 3 doz. case..per gro., 12 00
Black Eagle, 1-lb. cans, pr gr, $15 00
Black Silk—
5-lb. pail..... $0 70
Paste, 5-oz. cans....per doz. 75
Paste, ½-lb. cans.... " 1 05
Liquid, ½-pt. cans... " 1 05
Liquid, 6-oz. cans... " 75
Black Jack, ½-lb. cans. " 9 25
Dixon's Carb. of Iron. " 5 75
Nickel Plate..... " 4 50

POPPERS, CORN.

Round or Square, 1-qt. per doz. $1 05
Square, 1½-qt..... " 1 15
Square, 2-qt..... " 1 35
4-qt..... " 3 75

POTS, FIRE.

Clayton & Lambert's, each, $4 75@6 25
Gate City.....each, 6 25
Gem.....each, $6 75@8 50

POWDER.

See Ammunition.

PRESSES, FRUIT AND JELLY.

Enterprise Manufacturing Co.....25%

PRIMERS

See Ammunition.

PRUNERS.

Disston's Pole.....per doz. $6 50
Henry's Improved..... " 75&10%
Water's Improved..... " 80%

PULLERS.

Cork.
Daisy..... each, $3 10
Phœnix..... " 1 40
Quick and Easy..... " 2 70
Nail.
Giant.....per doz. 10 50
Giant Pattern..... " 6 00
Jumbo..... " 9 00
Tack—Giant ..... " 40

PULLEYS.

Awning—Jap'd.....60%
Clothes Line.....50&10%
Hay Fork.
Iron Wheel, 5-in.....per doz. $1 75
Wood Wheel, 6-in.... " 1 75
Wood Wheel, 6-in., pass knot, ...per doz. 2 15
Hot House—Jap'd.....50&10%
Screw—Jap'd.....60%
Side—Jap'd.....50&10%
Sash.
Common.....per doz. $0 20
Common-Sense, 2-in.. " 20
Empire Pattern, 2-in.. " 20
Ideal..... " 20
Steel..... " 25

PUMPS.

Pitcher Spout.

Nos.....	1	2	3	4
Each.....	$1.00	1.15	1.30	1 70

Spray.
Blizzard.....per doz. $14 50
Cyclone, tin..... " 3 40
Cyclone, copper..... " 6 75
Daisy..... " 9 00
Little Giant.....each,... 2 25

PUNCHES.

Conductors'.
No 22.....per doz $2 25
Machine.....per lb 19
Saddlers'.
Common .,. ... ..per doz 60c@70c
Good..... " 72c@84c

PUTTY.

In Bladders.
Strictly pure.....per 100 lbs. 2 35

RAIL.

Barn Door.
Matchless, 1-in..... ? c
Matchless, 1½-in..... 8½c
Storm King..... 4 c
Sliding Door.
Painted steel.....per ft. 4½c
Bronzed wrought iron...per ft. 8½c

RAKES.

Coal or Wood.....per doz. $5 20
Garden.
Steel.....70%
Steel, bow.....70%
Malleable iron, heavy.....60&10%
Hay.
Wood.....$1 50@$2 00
Lawn—Wood.
XXX.....per doz. $3 00
Automatic..... " 5 25
Lawn Queen..... " 2 75
Jumbo, 36 teeth..... " 5 25

RASPS—See Files.

RAZORS.

Bo-ras-ic.....50%
Red Devil.....50%
Tree Brand.....50%

REGISTERS.

List December 5, 1904.
Black and White Japanned, Reg. and Border .....70&10%
On Face .....75&10%

RINGS.

Bull.

Copper.....	2½ in.	3in.
Per doz.....	$1 10	$1 40

Rea's Improved Self-Piercing copper, pr doz 3 00 ....
Steel, per doz..... 85 95
Nickel plated..... 1 35 ....
and Ringers—Hog.
Blair's Rings.....per doz. $0 58
Blair's Ringers..... " 75
Brown's Rings..... 50
Brown's Ringers..... " 80
Champion Ringers.... " 1 00
Hill's Ringers..... " 70
Hill's Ring, boxes.... " 47
Major Rings..... " 00
Perfect Ringers..... " 95
Wolverine Rings..... " 1 40
Wolverine Ringers.... " 80
Fruit Jar.
White.....per lb.....30c
Key.
Split, round.....per doz. $0 17
Split, square..... " 22
Ball, round..... " 32

RIVETS.

and Burrs.
Copper Belt.....40%
Coppered Iron.....60&10&5%
Tinners'.....60&10%
Hame.....per lb. $0 10
Slotted Clinch per doz 40c@45c
Tubular
Nos 1 and 2 assorted sizes, doz, 45c

RIVET SETS

See Sets.

ROPE.

Cotton.
¼, 5-16 in. Com on reels. .per lb. 11½c
¼, 5-16 in Com. in coils. . " 12 c
¼, 5-16 Imperial in coils.. " 21 c
Sisal.
1st Quality .....12 c
Hardware Grade, rates, per lb...10 c
Pure Manila.
1st quality.....per lb. 15½c
Hardware Grade, rates... " 14½c

RULES.

Boxwood.....50&10%
Ivory.....

SASH WEIGHTS.

See Weights.

SAWS.

Back.
Disston's.....25%
Jackson's.....35%
Butchers'.
Disston's.....30%
Circular.
Disston's.....50%
Hiles'.....50&10%
Compass.
Common.....per doz $1 35@1 60
Disston's .....%25
Cross-Cut
Disston's.....45%
Dehorning.
Disston's.....per doz. $5 75
Hack.
Disston's.....25%
Keystone.....30%
Hand and Rip.
Brown's.....30%
Disston's No. 7.....30%
Disston's Nos. 8, D8, 12, 76, 112, D100, and 120 (new list).....25%
Keystone.....30%
Enterprise, hand.....per doz. $5 00
Our Saw, hand..... " 4 00
Our Saw, rip..... " 4 50
Keyhole—Disston's.....25%
Kitchen.
Sterling 25%
One Man.....50%
Panel
Brown's 30%
Disston's No. 7.....30%
Disston's No. D100.....25%
Pruning.
Brown's 25%
Disston's 25%
Wood
Common.....per doz. $4 50
Clover Leaf..... " 6 00

SAW BUCKS—See Bucks.

SAW SETS—See Sets.

SAW TOOLS—See Tools.

AW FRAMES.

Common, plain.....per doz. $1 25
Common, painted..... " 1 70

SCALES.

Counter.
Pelouze.....40&10%
Platform.
Osgood.....50%

SCOOPS.

Grain.
½-bu. "Hercules".....per doz. 13 75
1-bu. "Hercules"..... " 15 00

SCRAPERS.

Box.
Triangular.....per doz. $4 00
Cabinet.
Cast Steel . . . per doz , 60c@75c
Road.

Cubic ft.	7	5	3
Without run's, ea.	$4.00	3.75	3.50
With runners, ea..	4.25	4.00	3.75

SCREWS.

Bench.

Iron, in.....	1	1½	1½
	$3.50	4.00	4.75

Wood, white maple...per doz. $3 50
Hand—Wood.....10%
Hand Rail.....60&10%
Jack.....70&10&5%
Lag or Coach—all sizes, gimlet pointed.....75&5%
Saw—Centennial

Nos ..	1	2	3	4	5	6
Per dos.	18c	20c	26c	30c	22c	25c

Wood.
F. H. Bright.....87½&5%
R H Blued.....85%
F. H. Jap'd.....82½%
F. H. Brass.....85%
R. H. Brass.....80%
R. H. Nickel Plated.....75-10%

SCYTHES.

Be Ve Be, grass.....per doz. $8 50
Clipper, grass..... " 8 00
Clover Leaf Dutchman. " 8 00
Honest Dutchman..... " 8 00
Be Ve Be..... " 4 00

SHAVING SETS

Smith & Hemenway 60%

SETS

Nail.
Round, common ..... per doz $0 38
Square, common ..... " 42
Octagon, common ..... " 33
No. 5, square ..... " 75
Cup point, knurled ..... " 75

Rivet.
Farmers' ..... per doz. $1 20
Tinners' ..... 50&10%

Saw.
Aiken's Pattern ..... per doz $3 50
Common Lever ..... " 1 20
Disston's Monarch ..... " 6 50
Disston's X Cut ..... " 12 00
German ..... " 1 05
Morrill's Old Style ..... " 5 00
Morrill's Pattern ..... " 3 25
Leach's ..... " 80
Nash's Hand ..... " 3 15
Nash's X Cut ..... " 4 20
Stillman's Lever ..... " 1 30
Stillman's X Cut ..... " 2 50

SHARPENERS, SKATE.

Diamond ..... per doz $1 00
Smith & Hemenway 20%

SHAVES, SPOKE

Iron ..... per doz $1 10@1 85
Wood ..... " 2 75@4 75
Bailey's ..... 50&5%
Goodell's 15%

SHEARS

Pruning
Buckeye, No. 1 ..... per doz $5 75
Buckeye, No. 2 ..... " 7 40
California Pat., 9-in. ..... " 3 20
Cailfornia Pat., 10-in. ..... " 4 00
Draw Cut, No. 3 ..... " 13 75
Draw Cut, No. 4 ..... " 16 50
Henry's Pat. 0 01 14 012
Per doz $1.40 2.10 2.90 2.80
Star ..... per doz $4 00

Sheep—No BBA.
Inches 6 6½ 7
Reg. Grip $11.25 11.50 12.00
Nar. Grip, doz 11.00 11.25 12.25

Tinners'—See Snips.

SHEAVES, SLIDING DOOR.

Common.
Inches 3 4 5
Per set ..... $0.34 .42 .70

Hatfield's.
Per set $0.75 1.00 1.60

SHELLS—See Ammunition.

SHELLERS, CORN.

Union ..... per doz. $6 75

SHIELDS.

Expansion Bolt Shields ..... 50&10%

SHOES.

Conductor ..... 60&10%

SHOE POLISH—See Polish.

SHOT—See Ammunition.

SHOVELS AND SPADES.

Coal.
No 2 Woodford ..... per doz. $5 50
No. 182 ..... " 6 00
Ames' new list ..... Discount, 12½%

	Per doz.
Neverbreak, hollow bck, blk.	$15 75
National .... " " "	14 75
Buckeye .... " " "	10 00
Mohawk .... " " "	9 00

Drain.
Iwan's Perfection 50%

Railroad, etc.
Black Diamond ..... per doz. $1 50
Crescent ..... " 5 75
Keystone ..... " 8 75
Star ..... " 4 75
Vaterland ..... " 9 50
Hollow Back ..... " 4 75
Ames, new list ..... Discount, 12½%

Snow.
Per doz ..... $1.65@$9.00

Alaska Steel.
D Handle ..... per doz. $3 50
Long Handle ..... " 3 00

SINKS.

Cast Iron.
Painted ..... 50&10%
Enameled, White ..... 50&10%

Wrought Steel.
Painted, new list ..... 40-10&5%

SLEDGES—See Hammers.

SNAPS, HARNESS.

Champion 33⅓%
German Pattern ..... 30&5%
Judd's Pattern 50%

SNATHS.

Double Ring, Bush ..... per doz. $6 00
Patent Loop, Bush ..... " 5 75
Patent Loop, Grass ..... " 5 50

SNIPS, TINNERS'.

Clover Leaf ..... 40&10%
National ..... 40&10%

SOLDER—See Metals.

SPRINGS, DOOR.

Perfect.

Nos.	1	2	3	4
Per doz	30c	35c	40c	54c

Reliance.
Per doz ... light, $1.25; heavy, $2 50

Star.
Per doz ... light, 90c; heavy, $1 25
Torrey's ..... per doz. $1 35
Warner's No. 11 13
Per doz 75c $1 35

SQUARES.

Steel and Iron ..... 70&10%
(Add for bluing, $2.50 per doz., net.)
Miter.
Try.
Try and Bevel.
Try and Miter.
Fox's ..... per doz. $5 75
Winterbottom's 70%

SQUEEZERS, LEMON.

Common Wood ..... per doz. $0 70
Porcelain Lined, Wood ..... " 1 25
Boss, malleable iron ..... " 1 20
Iron Frame, porc'n bowl " 1 90
Iron Frame, glass bowl " 2 35
Little Giant, tin'd iron " 4 00
Drum, japanned ..... " 3 60
Drum, nickel plated ..... " 4 50

STAPLES

Blind.
Barbed ..... per lb ... 9¼@9½c
Butter Tub ..... " ..... 8 @8½c
Fence—less than carload.
Polished ..... per 100 lbs. $2 30
Galvanized ..... " 2 60
Netting.
Galvanized ..... per 100 lbs. 4 00
Wrought.
Wrought Staples, Hasps and Staples, Hasps, Hooks and Staples, and Hooks and Staples ..... 80-10&10%
Extra heavy ..... 75&10%

STEELYARD.
Discount 25%.

STONES.

Axe.
Hindostan ..... per lb 5½@7 c
More Grit ..... " 9½c
Washita ..... " 17 c
Emery ..... 60% @60&5%
Oil—Mounted.
Arkansas Hard ..... per doz. $23 00
Arkansas Soft ..... " 15 50
Hindostan ..... per lb 6½@6½
Oil—Unmounted.
Arkansas Hard ..... per lb $2 05
Arkansas Soft ..... " 1 10
Lily White ..... " 45
Queer Creek ..... " 15
Ouachita ..... " 38
Washita ..... " 26
Sythe.
Black Diamond ..... per gro. $9 00
Crescent ..... " 4 25
Gem Corundum ..... " 7 50
Green Mountain ..... " 4 50
La Moille ..... " 7 00
Quinnebog ..... " 5 00
Red End ..... " 3 75

STOPS, BENCH.

Hotchkiss' ..... per doz. $3 50
Stearns' ..... " 4 75

STOPPERS, FLUE.

Common ..... per doz. $0 40
Crown ..... " 45
Gem, flat, painted ..... " 85
Gem, cor'd, decorated ..... " 70
Kirch's ..... " 90
Perfect ..... " 70@85
Skinner's Common Sense " 80

STOVE PIPE—See Pipe.

STOVE BOARDS—See Boards

STOVE POLISH—See Polish.

STRAPS.

Scoop ..... per doz prs., $1 85
Skate ..... " " 60@70c

STRETCHERS.

Carpet.
Bullard's ..... per doz. $3 90
Excelsior ..... " 5 25
Malleable Iron ..... " 70
Perfection ..... " 6 30
King ..... " 4 50
Wire.
N. S. Elwood's ..... per doz. $6 00
O. S. Elwood's ..... " 6 00
Little Giant ..... " 5 75
Safety ..... " 10 00
Star Lever ..... " 6 25
Canton Tackle Block. " 9 50
Warner's ..... " 6 25

SWIVELS.

Malleable Iron ..... per lb. $0 70
Wrought Steel ..... per gro. 4 50

TACKS.

American Cut ..... 90&15%
American Wire ..... 85&20%
Bill Posters Cut ..... 90&20%
Blued Carpet ..... 90&10%
Tinned Carpet ..... 90&10%
Gimp ..... 90&10%
Upholsters' Cut ..... 90&20%
Upholsters' Wire ..... 90&10%
Double Pointed 90%
Copper ..... per lb. 32c
Canvas Nails ..... 75&5%
Clout Nails ..... 75&10%
Hungarian Nails 80%

TAPES, MEASURING.

Asses' Skin ..... 40&10%
Bend Leather 20%
Patent Leather 20%
Lufkin's Steel 25%
Lufkin's Metallic 30%

TEE BEVELS—See Bevels.

THERMOMETERS.

Tin Case ..... per doz. 80c@$1 25
Wood Back ..... " $2.00@12 00
Glass ..... " 12 00

TIES.

Bale.
Single Loop ..... 80&5%
All other kinds 70%
Cow—See "Chains."

TOOLS, SAW.

Disston's Universal 40%
Miniature.
Smith & Hemenway 25%

TRAPS.

Fly.
Ballon ..... per doz. $1 25
Harper's ..... " 1 35
Game.
Newhouse ..... 40&10%
New Victor ..... 70&10%
Mole.
Reddick's ..... per doz. $6 00
Mouse and Rat.
Wood Choker .. per doz. holes $0 13
Tin Choker ..... " " 75
Delusion ..... per doz. 1 15
Marty Rat ..... " 6 25
Marty Rat Imitation. " 3 50
Marty Mouse ..... " 3 00
Marty Mouse Imitation " 2 00
Hold-em, wire rat ..... " 3 75

TROWELS

Brick.
Clover Leaf 30%
Brade's ..... 15&5%
Disston's 30%
Rose's 20%
Plasterers'.
Clover Leaf 40%
Disston's 25%
W. & McP 25%

TRUCKS.

Bag ..... each, $2 75
Handy ..... " 1 85
Warehouse ..... 50&10%

No.	1	2	3
Half Ironed	$3.00	3.85	5.50
Full Ironed	3.25	4.50	6.45

TUBS, WASH

Standard, Wood				Ex.
Nos.	0	2	1	large
Per doz	$5.00	6.00	7.00	9.50
Dowell.				
Per doz	5.35	6.35	7.00	9.50
Cedar.				
Per doz	6.10	7.10	7.90	10.80
Indurated.				
Per doz	8.55	9.45	10.50	13.50
Galvanized.				
No.	1	2	3	
Per doz	$6.00	6.75	7.75	

TWINE.

	Per lb.
3-ply Cotton Wrapping	25c
4 " " "	25c
" " Extra Wrapping	27c
4 " " " Hvy. Wrapping	25c
4 " " Wrapping on tubes	27c
3 " " " " cones	25c
4 " " " " "	25c
India Hemp, ¼-lb. balls	19c
" " ½-lb. "	18c
" " ¼-lb. " doz.	75c
2-ply Jute, ¼-lb. "	14c
3-ply Jute, ½-lb. "	13c
Jute Wrapping, ½-lb. balls	14c
Jute Wool, 1-lb. balls	9½c
Seine.	

Nos.	9	12	15
Soft ..... per lb	26½	26	25
Med ..... "	26½	26	25
Hard ..... "	27	26½	26

Staging, ¼-lb. ball, size 21 ..... 26½c
" " " " 24 ..... 26c
" " " " 27 ..... 26c
Bagging " " 23c
3-ply "B" in hanks 18c
4- " "B" " 18c
3 " "A" " 27c
3 " Silver Finish, in hanks ... 37c
Fodder or Lath.
120 strand 8½c
200 strand ..... —

VISES.

Phœnix 30%
Phœnix Oval Slide.

Inches	2½	3	3½	4½
Each	$1.25	1.50	1.85	2.75

Parker's Parallel ..... 18&20%
Parker's Victor 15%
Parker's Combination 75%
Solid Box ..... 40&5%
Adams' Mechanics' ..... each 2 50
Williamson's Universal 60%

WARE.

Stove Hollow Ware.
Plain or Unground 50%
Ground Ware 45%
Enameled Ware 33⅓%
Country Hollow Ware, per 100 lbs. $3 00
White Enameled Ware.
Maslin Kettles ..... 60&10%
Covered Ware.
Tin'd and Turn'd ..... 35&10%
Enameled ..... 45&10%
Glue Pots.
Tinned 25%
Enameled 30%
Enameled.
Cherry Blossom and Chrysolite .. 50%

WASH BOARDS—See Boards.

WASHERS.

Standard O G. cast iron ... per lb. 2½c
Wrought iron in bulk, per lb:

In.	½	⅝	¾	⅞	1	1¼	1½
	9c	6½c	5c	4½c	4½c	4½c	3½c

Wrought steel in 5-lb. boxes, per lb.:

In.	½	⅝	¾	⅞	1	1¼	1½
	10c	7c	6c	5½c	5c	5c	4½c

WASHING MACHINES—
See Machines.

WEDGES.

Ax ..... per doz. $0 30
Galling ..... per lb. 10¢
Saw ..... " 8¢

WEANERS.

Calf.
Puller's, per doz ..... $2 00 to $2 50
Tyler's Safety, per doz 1 85 to 2 40
Carroll's, per doz ..... 3 00 to 3 75
Standard, per doz 3 00
Hoosier, per doz ..... 3 50 to 4 00

WEIGHTS.

Hitching ..... per lb. 2½c
Sash—f.o.b. Chicago ... pr ton. 26 50

WHEEL BARROWS.

Common Railroad ..... per doz. $17 00
Heavy Railroad ..... " 24 00
Panama Steel Tray ..... " 30 00
Klondike Steel Tray ..... " 28 00

WHEEL BARROWS.

Common Railroad ..... per doz $17 00
Heavy Railroad ..... " 24 00
Panama Steel Tray ..... " 30 00
Klondike Steel Tray ..... " 28 00

WHEELS.

Corundum ..... 70&10&5%
Emery ..... 75&5%
Well. Inches .. 8 10 12 14
Per doz $2.40 3.25 4.00 6.00

WIRE.

Barbed.	Painted.	Galv'd
Carloads .. per 100 lbs.	$2.33	$2.63
Less than car "	2.43	2.73

Brass.
In coils 20%
In 1-lb. spools, new list 50%
Broom—Tinned ... 60&10&10&10%
Cable—Same price as Barbed Wire.
Copper.
In coils ..... 20&10% 33⅓%
1-lb. spools, new list ..... 50&10%
Fence—Smooth.
Nos. 6 to 9, An'eal'd, pr 100 lbs. $2 30
Nos. 6 to 9, Galv'd .. " 2 60
Hair—New List 50%
Market.
Bright, full bdles ..... 70&5%
Bright, broken bdles 70%
Coppered, full bdles 70%
Coppered, broken bdles ..... 65&10%
Tinned, full bdles ..... 75&5%
Tinned, broken bdles ..... 65&10%
Picture—In coils .... 80% @80&10%
In 5-lb. spools ..... per lb 26c
Plain—Small lots $2 10
Car lots 2 05
Small spools 5c per 100 higher.

WRENCHES.

Acme Standard 60%
Alligator No. 1 ..... 85cnet
Always Ready 50%
Coe's Standard ..... 40& 10&5%
Agricultural ..... 75&5%
Ellis Adjustable 25%
Malleable "S" ..... per lb. 08c
Malleable ..... " 08c
Stillson Pipe 70%

WRINGERS.

No. 22, Guarantee ... per doz. $32 50
No. 110, Guarantee ..... " 32 50
No. 110, Brighton ..... " 23 50
No. 110, Bicycle ..... " 31 50
No. 530, Royal ..... " 32 50
No. 350, Universal ..... " 28 00
No. 300, Novelty ..... " 28 00
No. 310, Keystone ..... " 28 00
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Wheeling Corrugating Co., Wheeling, W. Va

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Obermayer Co., S., Cincinnati, O

Cement—Roofing
Auld & Conger Co., Cleveland, O
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Iwan Bros., Streator, Ill

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Stove & Range Co. of Pittsburgh, Pittsburgh, Pa
Twentieth Century Heating & Ventilating Co., Akron, Ohio
Youngstown Furn. & Supply Co., Youngstown, O

Furnaces—Soldering
Clayton & Lambert Mfg. Co., Detroit, Mich
Turner Brass Works, Sycamore, Ill

Furnaces—Warm Air
Kelsey Heating Co., Syracuse, N. Y

Furnace Pipe and Fittings
Green Fdy. & Furn. Wks., Des Moines, Ia

Gas Stoves
Stove & Range Co. of Pittsburgh, Pittsburgh, Pa

Generators—Acetylene
Ideal Epworth Acetylene Co., Waterloo, Iowa, & Johnstown, Penn

Grain Grader
Paxton & Gallagher Co., Omaha, Neb

Hangers—Door
Safety Door Hanger Co., Ashland, O

Hangers—Garment
Pullman Mfg. Co., Rochester, N.Y

Hardware Delivery Wagons
Sycamore Wagon Works, Sycamore, Ill

Hardware Jobbers
Clark, Quien & Morse, Peoria, Ill
Paxton & Gallagher Co., Omaha, Neb

Hardware Specialties
Paxton & Gallagher Co., Omaha, Neb
Peck-Hamre Mfg. Co., Berlin, Wis
Pullman Mfg. Co., Rochester, N. Y
Simmons Hardware Co., St. Louis, Mo
Smith & Hemenway Co., New York, N. Y
Taylor & Boggis Foundry Co. Cleveland, O

Heaters—Hot Water
Detroit Heating & Lighting Co., Detroit, Mich

Hinges
Griffin Mfg. Co., Erie, Pa
Lawson Mfg. Co., Chicago, Ill

Hollow Ware
Avery Stamping Co., Cleveland, O
Sperry, D. R. & Co., Batavia, Ill

Hones

Dreescher, S. R., New York, N. Y

Horse Nails

Standard Horse Nail Co., New Brighton, Penna

Horse Shoes

American Steel & Wire Co., Chicago Ill

Ice Cream Freezers

North Bros. Mfg. Co., Philadelphia, Pa

Iron Enamel

A-B Polish Co., Chicago, Ill
Nickel Plate Stove Polish Co., Chicago, Ill

Kitchen Utensils

Avery Stamping Co. Cleveland, O
Lalance & Grosjean Mfg. Co., Chicago, Ill

Lamps—Alcohol

Cohn & Co., G, New York, N. Y
Thurnauer, Otto, New York, N. Y

Lanterns

Berger Mfg. Co., Canton, O

Lawn Fence

Denning Wire & Fence Co., Cedar Rapids, Ia

Levels

Baker-McMillen Co., Akron, O

Lighting

Ideal Epworth Acetylene Co. Waterloo, Iowa and Johnstown, Penna

Lighting Systems

Detroit Heating & Lighting Co., Detroit, Mich

Lightning Rod

Electra Lightning Rod Co. Cresco, Ia
Foy, Edw. A. & Co., Cincinnati, O
Maher & Son Lightning Rod Co., Preston, Ia

Mail Boxes

Peck-Hamre Mfg. Co., Berlin, Wis

Mantles—Alcohol

Thurnauer, Otto, New York, N. Y

Meat Choppers

Enterprise Mfg. Co. of Pa., Philadelphia, Pa

Metal—Perforated

Harrington & King Perforating Co., Chicago, Ill

Metal Polish

A-B Polish Co., Chicago, Ill
Nickle Plate Stove Polish Co., Chicago, Ill

Metal Shingles

Burton, W. J. Co., Detroit, Mich
Canton Art Metal Co., Canton, O
Nat'l Sheet Metal Roofing Co., Jersey City, N. J

Miters

Whitacre, J. E. Mfg. Co., Rockford, Ill

Nails and Tacks—Copper

Hungerford, U. T., Brass & Copper Co., New York, N. Y
Hussey & Co., C. G., Pittsburg, Pa

Nuts

Columbus Bolt Works, Columbus, O

Paints and Paint Specialties

Buckeye Paint & Varn. Co., Toledo, O
Connors, Wm., Paint Mfg. Co., Troy, N. Y
Dixon, Jos. Crucible Co., Jersey City, N.J

Pencils

Dixon, Jos. Crucible Co., Jersey City N.J

Perforated Metal

Harrington & King Perforating Co., Chicago, Ill

Pipe—Furnace

Michigan Safety Furnace Pipe Co., The Detroit, Mich

Plungers

Berger Bros. Co., Philadelphia Pa

Punches

Armstrong-Blum Mfg. Co., Chicago, Ill
Bertsch & Co., Cambridge City, Ind
Niagara Machine & Tool Works., Buffalo, N.Y
Robinson, Mfg. Co., J. M., Cincinnati, O

Putty—Stove

Connors, Wm. Paint Mfg. Co., Troy, N.Y

Rasps

Disston, Henry & Sons., Philadelphia, Pa
Carver File Wks., Philadelphia, Pa

Razors

Dreescher, S. R., New York, N. Y
Smith & Hemenway Co., New York, N.Y

Razors—Safety

Shrp-Shavr Razor Co., New York City

Registers

Ferrosteel Co., Cleveland, O
Henry & Scheible Co., Cleveland, O
Mueller, L. J., Furn. Co., Milwaukee, Wis
Schwab & Sons Co., Milwaukee, Wis

Rivets

Columbus Bolt Works, Columbus, O
Hungerford, U.T., Brass & Copper Co., New York, N. Y

Roasters

Wheeling Corrugating Co., Wheeling, W. Va

Roofers' Supplies

Auld & Conger Co., Cleveland, O

Roofing—Iron and Steel

American Sheet & Tin Plate Co. Pittsburgh, Pa
Berger Mfg. Co., Canton, O
Burton, W. J. Co., Detroit, Mich
Canton Art Metal Co., Canton, O
Canton Mfg. Co., Canton, O
Delphos Mfg. Co., Delphos, Ohio
Eller Mfg. Co., Canton, O
Follansbee Bros. Co., Pittsburgh, Pa
Friedley & Voshardt, Chicago, Ill
La Crosse Steel Roof. Co., La Crosse, Wis
Nat'l Sheet Metal Roof. Co., Jersey City, N. J
Schoedinger, F. O., Columbus, Ohio
Sykes Steel Roofing Co., Chicago, Ill
Tanner & Co. Indianapolis, Ind
Wheeling Corrugating Co., Wheeling, W. Va

Roofing Cement

Auld & Conger Co., Cleveland, O
Connors Paint Co., The Wm., Troy, N.Y

Roof Paint

Dixon, Jos. Crucible Co., Jersey City, N.J

Rules

Lufkin Rule Co., Saginaw, Mich

Sash Balances

Pullman Mfg. Co., Rochester, N.Y

Saw Sets and Saws

Disston, Henry & Sons, Philadelphia, Pa
Smith & Hemenway Co., New York, N.Y

Screens—Perforated Metal

Harrington & King Perforating Co., Chicago, Ill

Screen Door Checks

Pullman Mfg. Co., Rochester, N. Y

Screws

Columbus Bolt Works, Columbus, O

Screw Drivers

North Bros. Mfg. Co., Philadelphia, Pa

Seamless Tubing—Brass & Copper

Hungerford, U. T., Brass & Copper Co., New York, N. Y

Seed Cleaners

Paxton & Gallagher, Omaha, Neb

Shears

Bertsch & Co., Cambridge City, Ind
Niagara Machine & Tool Works, Buffalo, N. Y
Robinson, Mfg Co., J. M., Cincinnati, O
Simmons Hardware Co., St. Louis, Mo

Sheets—Black and Galvanized

American Sheet & Tin Plate Co. Pittsburgh, Pa
Berger Mfg. Co., Canton, O
Tanner & Co., Indianapolis, Ind
Wheeling Corrugat'g Co., Wheeling, W. Va

Sheets—Corrugated

Sykes Steel Roofing Co., Chicago, Ill

Sheets—Planished

American Sheet & Tin Plate Co., Pittsburgh, Pa
Follansbee Bros., Pittsburg, Pa
Ward-Dickey Steel Co., Indiana Harbor, Ind

Sheets—Steel

American Sheet & Tin Plate Co., Pittsburgh, Pa.
American Steel & Wire Co., Chicago, Ill
Follansbee Bros. Co., Pittsburgh, Pa

Sheet Metal Ornaments

Gerock Bros. Mfg. Co., St. Louis, Mo

Shelf Boxes

Green & Co., A. H., New York, N. Y

Shovels

Avery Stamping Co., Cleveland, O

Siding

Foster & Sons Co., Wm., Springfield, Ill
Milwaukee Artistic Metal Ceiling Co., Milwaukee, Wis

Sifters

Stuber & Kuck, Peoria, Ill

Skylights

Berger Mfg. Co., Canton, O
Burt Mfg. Co., Akron, O
Canton Art Metal Co., Canton, O
Eller Mfg. Co. Canton, O
Schoedinger F. O., Columbus, O
Sykes Steel Roofing Co., Chicago, Ill

Skylight Gearing

Sykes Steel Roofing Co., Chicago, Ill
Weiss, H. & Co., New York, N.Y

Slate Roofing

Auld & Conger Co., Cleveland, O

Slating Nails

Hussey & Co., C. G., Pittsburg, Pa

Squares, Machinists'

Disston, Henry & Sons, Philadelphia, Pa

Stampings—Sheet Metal

Avery Stamping Co., Cleveland, O

Statuary

Gerock Bros. Mfg. Co., St. Louis, Mo

Steel

American Steel & Wire Co., Chicago, Ill

Stoves and Ranges

Allen Mfg. Co., Nashville, Tenn
Cox Stove Co., Abram, Philadelphia, Pa
Culter & Proctor Stove Co., Peoria, Ill
Foster Stove Co., The, Ironton O
Fox Furnace Co., Elyria, Ohio
Landay Steel Range Co., St. Louis, Mo
Monitor Stove & Range Co., Cincinnati, O
Ohio Stove Co., Portsmouth, O
Portsmouth Stove & Range Co., Portsmouth, Ohio
Sheridan Stove Mfg. Co., Quincy, Ill
Stove & Range Co. of Pittsburgh, Pittsburgh, Pa.
Twentieth Century Heating & Ventilating Co., Akron, Ohio

Stoves—Alcohol

Cohn & Co., G, New York, N. Y
Thurnauer, Otto, New York, N. Y

Stove Mats

Stuber & Kuck, Peoria, Ill

Stove Patterns

Cleveland Castings Pattern Co., Cleveland, O
Cope Pattern, Geo. W. Wks., Detroit, Mich
Quincy Pattern Co., Quincy, Ill
Vedder Pattern Works, Troy, N Y
Weller Pattern Co. Quincy, Ill

Stove Pipe

Hemp & Co., St. Louis, Mo

Stove Pipe Thimbles

Stuber & Kuck, Peoria, Ill

Stove Polish

A-B Polish Co., Chicago, Ill
Nickel Plate Stove Polish Co., Chicago, Ill

Stove Putty

Connors Paint Mfg. Co., Wm., St. Louis, Mo
Dixon, Jos. Crucible Co., Jersey City. N. J.

Stove Repairs

American Stove Repair Works, St. Paul, Minn
Brauer, A. G., Supply Co., St. Louis, Mo
Manufacturers Stove Repair Co., Chicago, Ill
U. S. Stove Repair Co., Minneapolis, Minn

Stove Trimmings

Cleveland Nickel Works, Cleveland, O

Sugar Kettles

Sperry, D. R. Co., Batavia Ill

Supplies—Foundry

Obermayer Co., S., Cincinnati, O

Supplies—Stove Dealers'

Brauer, A. G., Supply Co., St. Louis, Mo

Tacks

Hungerford, U. T., Brass & Copper Wks New York, N. Y

Tapes

Lufkin Rule Co., Saginaw, Mich

Technologist

Hooper, C. N. Dubuque, Iowa

Thermometers—Oven

Evans Stamping & Plating Co., Taunton, Mass

Tin—Perforated

Harrington & King Perforating Co., Chicago, Ill

Tinners' Furnaces

Clayton & Lambert Mfg. Co., Detroit, Mich
Turner Brass Works, Sycamore, Ill

Tinners' Tools

Armstrong, Blum Mfg. Co., Chicago, Ill
Auld & Conger Co., Cleveland, O
Berger Bros. Co., Philadelphia, Pa
Bertsch & Co., Cambridge, Mass
Dries & Krump Mfg. Co., Chicago, Ill
Lufkin Rule Co., Saginaw, Mich
Niagara Machine & Tool Works, Buffalo, N. Y
Robinson Mfg. Co., J. M., Cincinnati, O
Smith & Hemenway Co., New York N.Y
Weiss & Co., H., New York, N. Y

Tinplate

American Sheet & Tin Plate Co., Pittsburg, Pa
Eller Mfg. Co. Canton, O
Follansbee Bros. Co., Pittsburgh, Pa
Merchant & Evans Co., Philadelphia, Pa
Schoedinger, F. O., Columbus, O
Tanner & Co., Indianapolis, Ind
Wheeling Corrugating Co., Wheeling, W. Va

Tinware Trimmings

Berger Bros. Co., Philadelphia, Pa

Tools, Etc.

North Bros. Mfg. Co., Philadelphia, Pa
Simmons Hdw. Co., St. Louis, Mo

Tools—See Carpenters' Tools

Tools—Linemen's

Smith & Hemenway, New York, N.Y

Trowels

Avery Stamping Co., Cleveland, O
Disston, H. & Sons, Inc., Philadelphia, Pa
Griffin Mfg. Co., Erie, Pa

Tubing—Brass and Copper

Hungerford, U. T., Brass & Copper Co. New York, N. Y

Tubing—Heavy Tin

Dieckmann, Ferdinand, Cincinnati, O

Ventilators

Berger Mfg. Co., Canton, Ohio
Burt Mfg. Co., Akron, Ohio
Canton Art Metal Co., Canton, O
Canton Mfg. Co., Canton, O
Eller Mfg. Co., Canton, O
Friedley & Voshardt, Chicago Ill
Globe Ventilator Co., Troy, N.Y
Lewis Mfg. Co., Streator, Ill
Merchant & Evans Co., Philadelphia, Pa
Pullman Mfg. Co., Rochester, N. Y
Uno Ventilator Co., Lynn, Mass

Wagons

Sycamore Wagon Wks., Sycamore, Ill

Washers

Columbus Bolt Works., Columbus, O

Washing Machines

Paxton & Gallagher, Omaha, Neb
White Lily Mfg. Co., Davenport, Ia & Toledo, O

Wire

American Steel & Wire Co., Chicago Il

Wire Goods

Denning Wire & Fence Co., Cedar Rapids Ia
Pittsburgh Steel Co., Pittsburgh, Pa

Wants and Sales

For Paid Yearly subscribers THE AMERICAN ARTISAN will insert under this head advertisements of six lines WITHOUT CHARGE for employers wishing to secure employes, persons seeking situations, parties desiring to purchase a business, businesses for sale, partners wanted, to exchange, etc. Those who respond to these announcements will please mention that they "READ THE ADVERTISEMENT IN THE AMERICAN ARTISAN."

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Washington, D. C. Consulting Expert in Patent Causes. U. S. and Foreign Patents. Send for leaflet on "Rejected Patent Applications."

For Sale — Hardware, established 34 years. Cash business. Money maker; growing trade; nice stock; good town; fine farms; best soil. Will retire; can be had right. Now is your time. If interested write or call on B. B. Myers, Nevada, Ohio. 6-3t

Old tinner wishes to sell tinshop and roofing business in northern Iowa. Good county seat town. Established trade. Shop 20 by 55 feet; warehouse 16 by 40 feet. Small five-room house on lot 50 by 150 feet. All tinners' tools—brake circle, shears, square shears, etc. Employment for three workmen and more at times. Property worth over $3,000. Will sell for $2,100. Address Box 447, Cresco, Iowa. 6-3t

For Sale—Or will exchange for real estate, my stock of hardware, stoves, paints and fixtures. Invoices about $4,500. Located on the northwest side of Chicago. Address L. Greenheid, 767 Armitage Ave., Chicago.

For Sale—On account of sickness owner will sacrifice ten thousand dollar stock of general hardware in a northern Illinois city of 10,000 inhabitants. This stock must be sold at once. Seventy-five cents on the dollar takes it; no trade. Write for particulars. Address L-4, care of THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 5-3t

For Sale—Stock of hardware, including tin shop, located in Lake County, Illinois. Failing health reason for selling, and must go West. Good chance for tinsmith. For further particulars address L-2, care of THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 5-3t

For Sale—$3,000 stock of hardware at a reduction. This stock is clean, good and a snap at the price. I will consider a part payment on the stock to right party. Good reason for selling. Anyone interested in a good proposition will please write to Lock Box 295, New Lisbon, Wisconsin. 4-3t

For Sale or Exchange—Have 55 second-hand register borders ranging in sizes from 8x8 to 12x15. Send stamp for list. Address M-97, care of THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 4-3t

TINNER'S TOOLS.

For Sale—Tinners' tools, $75.00. Send for list to W. J. Padelford, 16 Bristol St., Adrian, Michigan. 6-3t

For Sale—Good set of tinners' tools, nearly new. Will sell cheap. Address Hill & Martin, Independence, Missouri. 6-3t

For Sale or Exchange—Set of tinner's tools, also four good show cases and one new gun case. Would exchange for a typewriter, cash register, or motor cycle. Address L-5, care of THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 5-3t

Wanted—30" or 31" x 1½" or 2" Stove Pipe Formers. Must be in good condition and cheap. Also 30" Sheet Iron Folder. Address Adolph Scheid, Mishawaka, Indiana. 5-3t

Wanted—To buy one second-hand wiring machine; one setting down machine. To be in good condition. Address George E. Ainsworth, Canton, Illinois. 4-3t

For Sale Cheap—1 2x37-in. forming rolls, 1 20-in. groover, 1 wiring machine, 1 setting down machine, 1 40-in. hollow mandrel, 1 blowhorn stake, 1 square stake, 1 bench plate, 1 30-in. wood roofing folder, 1 stove truck, all in good condition; some are new. Address 52 Best St., Dayton, Ohio. 5-3t

HELP WANTED.

Wanted—Foreman for tin and cornice shop. One who can manage men and carry out the business in absence of owner. Address C. C. Kraus Co., 1337 W. Lombard St., Baltimore, Maryland. 6-3t

Wanted—An experienced man to clerk in hardware and stove store. Good town of 3,000 people and fine schools. Married man preferred. Address Paul M. Whaley, Oxford, Ohio. 6-3t

Wanted—A first-class all around tin and sheet iron worker. Must be steady and reliable. Wages $3.00 per day, and steady work guaranteed. Address L-3, care of THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 5-3t

Wanted—A first-class tinner for in and outside work. Only first-class man need apply. State salary wanted, age, experience and references as to character, in first letter. Address Peter Hoffman, Sedalia, Missouri. 5-3t

Wanted—A sheet metal worker and plumber. Steady work to the right kind of a mechanic; one that can make estimates. Good wages. Apply to The Geo. Wilson Hardware & Supply Co., Florence, Colorado. 5-3t

Wanted—A first-class tinner for in and outside work. One capable of doing all kinds of work coming to a country shop. Only good, steady, and reliable man need apply. Steady job all year round for the right man. Address M-98, care of THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 4-3t

Wanted—A first-class tinner for furnace and shop work, who can do plumbing and other heating. Must be good hustler and be able to take charge of shop. Steady job to a good man. State age and experience. City of 5,000 in South Dakota. Salary 35 cents per hour. Address M-96, care of THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 4-3t

Wanted—A good tinner and furnace man. One who can do plumbing also. Steady job to good man. Address H. B. Brown, Wyoming, Illinois. 4-3t

Young Man Wanted—One who wants to learn the plumbing and heating trade in a country town near Chicago. Address M-100, care of THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 4-3t

Tinner Wanted—One who understands furnace and plumbing work. Steady position. Address F. C. Beckert, Huntley, Illinois. 4-3t

Wanted, Hardware Clerk—One who can do some tinwork preferred, or tinner who would clerk in store. Please state experience and salary wanted in first letter. Address Frank L. Wilson, Mechanicsville, Iowa. 4-3t

SITUATIONS WANTED.

Situation Wanted—By first-class sheet metal worker. Eighteen years' experience in general jobbing, furnaces, cornices and brick work. Sober and steady. Competent to take charge of shop. West or Southwest preferred. Address, with particulars, Box 27, Oswego, New York. 6-1t

Situation Wanted—By first-class tinner. Twenty-five years of age. Speaks German and English. Good habits, honest and reliable. Address, for particulars, Reedsburg Hardware Co., Reedsburg, Wisconsin. 6-3t

Situation Wanted—By first-class tinner with twenty years' experience in hot air, furnace and general job work. Strictly temperate. Address L-6, care of THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 6-3t

Situation Wanted—By first-class plumber, steam and hot water man. Can also do gas fitting. Am steady, sober and a thorough mechanic. Address P. O. Box 144, Mount Carroll, Illinois. 5-3t

Situation Wanted—Plumber, steam and hot water fitter, in all its branches. Can assist at tinning. Want work in small town. Address Jesse M. Wildrick, Ellensburg, Washington. 5-3t

Situation Wanted—By September 1st, as tinner and furnace man. Fifteen years' experience. Colorado or Montana preferred. Address M-99, care of THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 4-3t

Wanted—Position as traveling salesman for hardware, furnaces or plumbing supplies. Some experience. Acquainted with trade of northern Kansas. Can furnish gilt-edge references. Address L-1, care of THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 4-3t

Situation Wanted—As tinner, helper or handy man in hardware or shop. Sober and reliable. State wages. Address J. H. B., the Tinner, Jacksboro, Texas. 4-3t

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The cleanest, up-to-date hardware stock with tin shop in connection in state of Michigan. Doing a good business in a live factory town of 2500 population. Surrounded by excellent farming country. Only one other hardware in the town. Will inventory between $4,000 and $5,000. Good reasons for selling. Must be sold within thirty days. Address Charles M. Edelman, Lowell, Michigan. 4-4t

Superintendent

Wanted by an Ohio Stove manufacturer, beginning manufacture of gas ranges and heaters. An experienced and competent superintendent to take charge of gas goods manufacturing. Address, giving age, experience and wages wanted, "Superintendent," care of THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 4-4t

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With experience operating power cornice press, one familiar with fireproof metal window frames. Steady employment. State experience and wages expected. Address F-10, care of THE AMERICAN ARTISAN, 355 Dearborn Street, Chicago. 17-ufa

Salesman Wanted

To carry a good line of Stove Polish as a side line. Cash commission basis. Address for full particulars, K-25, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 1.4t

Ohio Salt Company uses 25 glass top Burt Ventilators on their new factory.

Fresh Air in Spite of the Fumes

You can imagine what the atmosphere in a factory would be without provision for ventilation. Ordinary methods of ventilation are not effective in such places; consequently it is necessary to provide for ventilation by the very best appliances which can be obtained.

That is why the Ohio Salt Company, of Rittman, Ohio, use 25 large glass top

Burt Ventilators

on their factory. Look at them in the picture. The Ohio Salt Company's ventilating troubles are over for they have fresh air at all times in spite of the fumes.

Burt Ventilators are made with an adjustable sliding sleeve damper, which is a very important feature as it is possible to open the ventilator to any degree by simple adjustment of the damper, which is held firmly by a special attachment, thus requires no attention and is not affected by air currents and it is not necessary to tie the rope or chain to a nail, hook or post as in the case of the common flat damper. The air shaft is free and unobstructed; thus the pulling power is greater in the Burt than other makes.

The glass tops make them a combination skylight and ventilator from which the light is never shut out, even when the damper is closed. In other makes when the damper is closed the light is instantly shut off, and at just the time when the skylight feature is needed.

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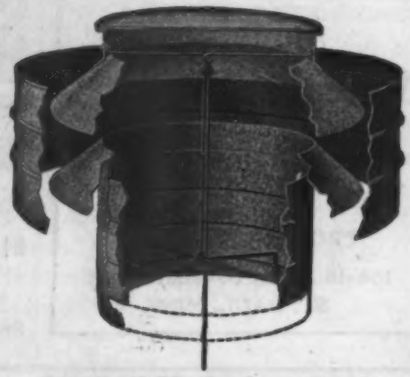

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WANTED in every city in United States to know that I have a good proposition. Let me hear from you. Address O. W. Ilten, Cedar Rapids, Iowa. 2-4t

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Start new—and improve quality of ware in old plants.
Thirty-four years' practical experience.
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Vitreous Enameling
TECHNOLOGIST

Designs, builds and starts new plants, improves quality and reduces the costs in those already established.

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LOCK-CORNER SHELF BOXES
For the Hardware Trade.
THE A. H. GREEN CO.,
97-101 Warren St., NEW YORK.

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Shop Rights to manufacture in Illinois an accepted fire proof metal window frame and sash. Enclose drawing and state price. Address "Illinois", care of THE AMERICAN ARTISAN, 355 Dearborn Street, Chicago. 17-tfn

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355 Dearborn Street, CHICAGO

Please send us THE AMERICAN ARTISAN each week for three months. At the end of that time we will remit Two Dollars for one year's subscription, or 50 cents in case we decide to discontinue.

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Dixon's Silica-Graphite Paint

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IF YOU BUY YOUR
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Lowest Prices. Prompt Shipments.
GIVE US A TRIAL.
A. G. BRAUER SUPPLY CO., 316-318 N. Third St., St. Louis, Mo.

The S. Obermayer Co.
These Two—
No. 670
Heavy Stove Plate Facing
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National Return Facing
will give you clean, smooth castings with that dark-blue color you like to see. Let us send you a barrel of each on approval.
The S. Obermayer Co.
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American Stove Repair Works
STOVE AND FURNACE REPAIRS
PROMPT SHIPMENTS
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STOVE Repairs
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Prompt Shipments. Give Us a Trial.

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Russia Finish, pat. lock
Stove Pipe
It is made of a very high grade of uniform color Blue Polished Steel, and is coated to prevent rusting. Made in all sizes. Packed twenty-five and fifty joints to crate. For sale by the jobbing Hardware Trade throughout the United States. Mfg. by
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2nd & Chouteau Ave.
ST. LOUIS.
In the event your jobber does not handle this pipe, send your inquiries to us.

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REPAIRS TO FIT ALL STOVES AND FURNACES
Courteous Treatment — Prompt Shipments
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DESIGNS and ESTIMATES FURNISHED FOR ALL KINDS OF STOVE PATTERNS
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THE RIGHT KIND
of Oven Thermometer is
THE "ACME"

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MADE BY EVANS STAMPING AND PLATING COMPANY TAUNTON, MASS.
Western Agent, C. H. MATTHEWS, Detroit, Mich.

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For Stoves and Heaters
The Cleveland Castings Pattern Co.
CLEVELAND, OHIO

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For Stoves and Heaters
First-Class in Wood and Iron
Vedder Pattern Works, Troy, N.Y.
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Light, smooth, full measure and guaranteed perfect. Made from original patterns. Metal, the right kind in the right place. Ask your jobber for them or write us.
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IRON & WOOD
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Star Brand Copper Roofing Material

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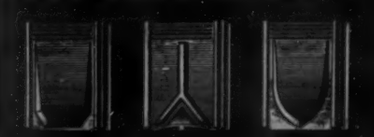

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Corrugated Sheets, painted or galvanized.
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Do away entirely with wiping joints. A practical article and BIG SELLER.
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All Roll Roofings Resquared and Double Cross Locked.

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FIRE PROOF
PRACTICALLY INDESTRUCTIBLE
The Most Artistic Interior Finish
Designed for Rooms of All Kinds
MODERATE IN COST

Manufactured by
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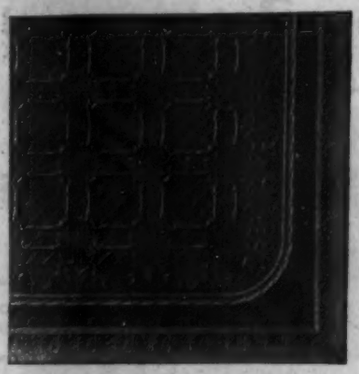

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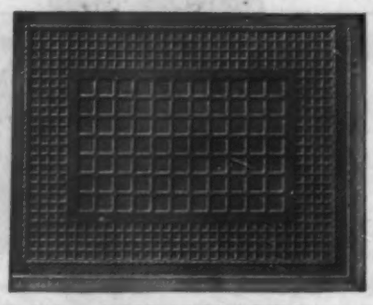
for the Reason that it gives them Indoor Work during Inclement Weather.

Send Measurements and Ask for Estimate.

We Furnish Drawings.



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"Reg. in U. S. M&E Pat. Off."

14 x 20 TERNE PLATES

For Fire Doors and Shutters

Made to conform strictly to specification of the NATIONAL BOARD OF UNDERWRITERS.

Each Sheet Stamped with Brand and Thickness.

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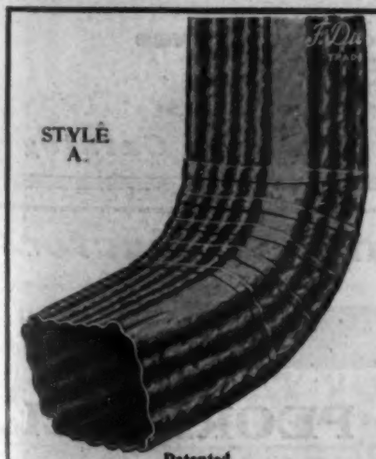

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Made of One Piece of Metal, Bear Trade Mark

F. Dieckmann

Galvanized After Formation—Charcoal, Copper, Old Style.

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TOP-NOTCHER
40 lbs. Coating

TUSCORA
25 lbs. Coating

High grade but NOT 2 high priced

You and your customers 2 will like them

WRITE TO-DAY FOR

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CUT OFFS
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Quick Shipments Our Specialty *Send for Catalog*

Plecker's *Corrugated* Expanding *Conductors*

Have no Cross Seams. Made of Galvanized Iron in ten-foot lengths. [redacted] Will not burst when full of ice.

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MOST ORNAMENTAL AND LOWEST PRICED MADE

"Invisible Joint"
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WHICH ARE
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Detail Work a Specialty
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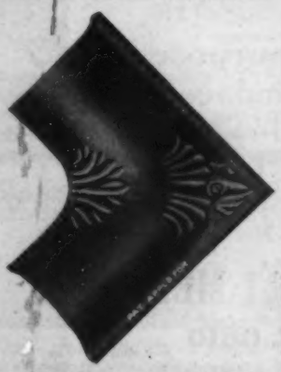
PATENT APPLIED FOR
Galvanized After Formed

ORNAMENTAL
DURABLE
CHEAP



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A sure cure for smoky chimneys, the best for ventilation.
4" to 30"
Send for Catalogue
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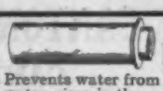

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Meier Drain Trap
Prevents water from backing into cellar when water rises in the sewer. Lets water out of cellar. Keeps out sewer gas. Guaranteed. Any one can attach. Pat. applied for. Write for particulars.
THE MEIER DRAIN TRAP MFG.
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PERFORATED METALS
OF EVERY DESCRIPTION AND FOR ALL PURPOSES
FOR SCREENS OF ALL KINDS

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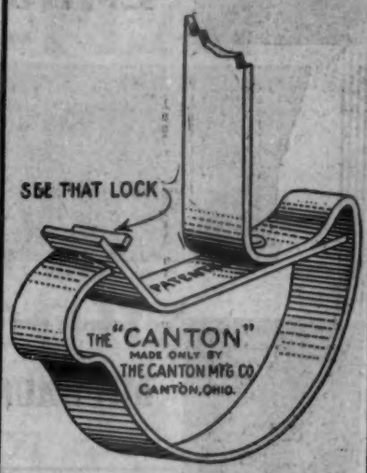

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is the strongest and most economical Eave Trough Hanger on the market.
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are unquestionably the best, most durable and economical line of paints manufactured.

Our products are designed to meet the wants of all classes of paint consumers. We guarantee all paints and varnishes bearing our name. Made of the best material obtainable.
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Improved Quick and Easy, Rising Steam, Electric and Hand Power.
SEND FOR CIRCULAR.
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No. 1 Fire Pot $6.50 Net.

Jobbers supply at factory price, or we will ship direct, if cash accompanies the order.

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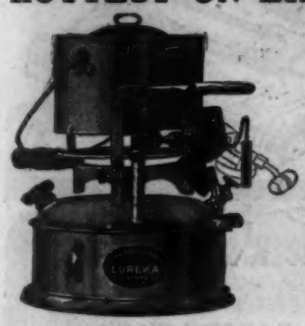

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is a little thing to look for, but a big thing to find; it appears on all genuine

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Eaves Trough, Conductor Pipe — Brick and Stone Siding
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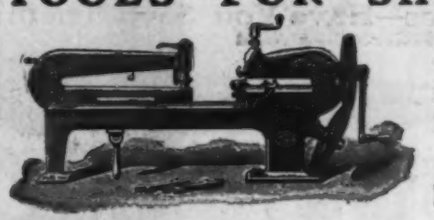

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MADE BY

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Made entirely of STEEL

Punches ¼ in. hole in ¼ in. and equivalent

Let us send you one on trial.

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PROMPT SHIPMENT FROM STOCK.

Two Reasons Why The Steel Brakes Are Better

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1. By our patented construction we have succeeded in getting the greatest amount of strength with the minimum weight. They work much faster and easier, and do fully one-fourth more of the average work than any other brake.

2. They are made of Bessemer Steel, and all the working parts where strength is required are made of non-breakable steel castings.

You will be surprised to find out how cheap you can buy this up-to-date machine

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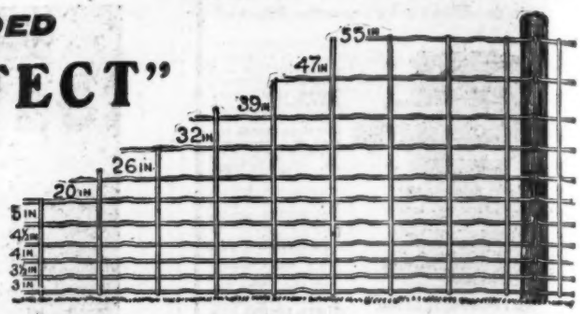
"PITTSBURGH PERFECT" Fences



The strongest on the market and the most satisfactory. You can't know what a really good fence is until you have tried the

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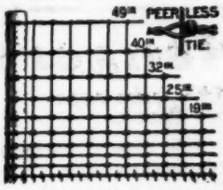
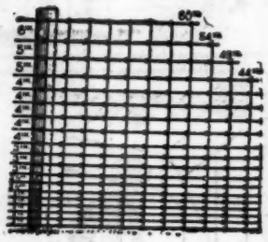


For yard and pasture has no equal. Our Peerless Cabled Fence with barb wire in the bottom turns hogs, absolutely. We beat the world on Poultry Fence. We make perfect Barb Wire. We ship mixed cars Woven Fence, Barb Wire and Nails.



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THE WONDERFUL

"SHRP-SHAVR" 25c SAFETY RAZOR

which consists of two simple parts—the frame and the blade. The frame is satin finish silver-plated, holding blade at exact angle for safe, quick and easy shaving. The blade is of the finest tempered steel, scientifically ground, honed and stropped to the keenest edge. Adjusted or released from frame in an instant. We sell you the whole razor at 25c, so as to create a market for our blades.

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25¢ *Its all in Our blades*

"Yankee Tools"

Are Without Equal in Quality or Efficiency in Practical Use

New Styles—Have You Seen Them?

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RATCHET "SCREW EYE" DRIVER, NOS. 80 and 81

ASK YOUR JOBBER ABOUT THEM

Send for "Yankee" Tool Catalog.

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WE HAVE THEM
SIZES, ONE EIGHTH TO TWO INCHES.
ROMAN, ROUND FACE GOTHIC, SHARP FACE GOTHIC, HAIR-LINE GOTHIC, FLATTENED FACE GOTHIC, ANTIQUE POINTED AND REVERSED RAMOS FOR BRANDING IRONS.
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Body 20 inches from the ground, full width; regular height wheels, and yet will turn short.

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A Full Line of Horse Nails
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Run Easiest
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To the practical Saw User this tells the full story of HIGHEST PERFECTION in Material, Temper, Design and Workmanship attained for the DISSTON BRAND OF SAWS.

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Keystone Saw, Tool, Steel and File Works

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Side glasses may be reversed at any time; all easily adjustable; all glasses in plain view from both sides; brass trimmings on both sides.

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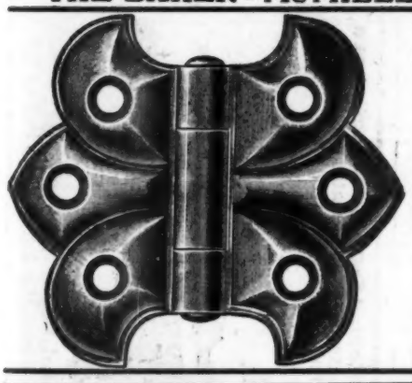

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Also a complete line of Shelf Brackets, Barn Door Hangers, Door Bolts, etc. Our wrought surface hinges are strong, massive and beautifully finished, and every one perfect. All Goods Guaranteed.

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YANKEE [All Steel] DAMPERS and CLIPS

FOR SMOKE PIPE AND FURNACE PIPE

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is absolutely free from poisonous substance, is made by careful, experienced men, by a company founded in 1850. The first enameled ware and blue and white ware made in this country was made in our mills. We know how to make enameled ware safe and durable. We make it safe and durable because we are proud of the trade mark. Look for the blue label.

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Sizes 6 to 12 inches. Sold by jobbers of Hardware and Tinners' Supplies.

Notice one of its **Strong Features.** The upward sloping opening in back of hood creates a constant upward draft, no matter how depressing the atmosphere.

You need it for some of your customers' chimneys.

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"The machine you have been looking for."

Made of best Crucible Steel Castings. Unexcelled as a time and labor saver. Bends a greater variety of angles than any other machine.

Will bend cold material up to 1 by ⅜ inches; rounds and squares up to ⅜ inch. On hot work up to 3 by ¾.

Sold under positive guarantee to do satisfactory work.

Manufactured by

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The Gem No. 4

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has a decided advantage over his competitor. All other rural boxes are alike—the Gem No. 4 is different and better. Retails for **$1.00** with a splendid profit.

INSIST that your Jobber furnish this or write **The Peck-Hamre Mfg. Co.** BERLIN, WIS.

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LIGHTNING RODS

We manufacture Pure Copper Wire Cable Lightning Rods, made of 28, 30 and 49 Wires, with complete outfit of trimmings.

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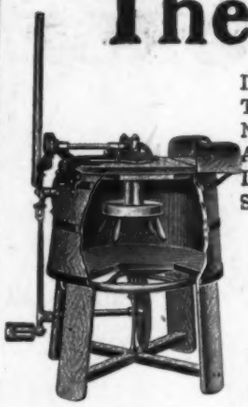
The White Washer

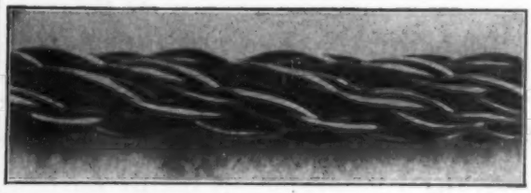


DOUBLE BALL BEARING. FLY WHEEL UNDER THE TUB. HIGHEST SPEED. EASIEST RUNNING. QUICKER REVERSE. FOOT POWER ATTACHMENT. TUB OPENS WHEN MACHINE IS IN FULL MOTION. FIVE YEARS' GUARANTEE. SOLD TO ONLY ONE DEALER IN EACH TOWN.

Ask for Exclusive Agency
and Get Acquainted With

The White Way

White Lily Manufacturing Co.
1500 Rockingham Road, - Davenport, Iowa



We have the best Pure Copper Cable

Lightning Rods

and fixtures on the market, and to prove what we say is right, we are willing to send any firm a sample outfit and they can look it over, and if it is not the best they have ever seen, and not satisfactory in every way, we want the whole shipment returned at our expense and it costs them nothing. We manufacture all our own goods and know just what they are, and we want every hardware dealer to write to us for prices and territory. We give a $500.00 guarantee and also one of our improved static machines.

WRITE TODAY TO

Maher & Son Lightning Rod Co., Preston, Iowa

Blick No. 3 The Best Box

For Rural Free Delivery

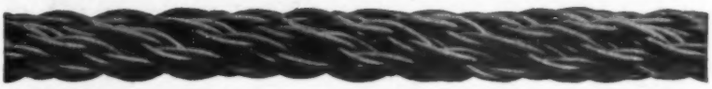
Be Just With Customers

Sell them Blick No. 3 boxes. They are big ones, 6½ x 8½ x 19 inches. Made of heavy galvanized steel. Painted green, the new government color. Same shape and color as city boxes. Have Positive Locking Flag Signal, Automatic Latch, Watertight Quality. Every box tested, every box right, every box warranted. They will get the business. You better get them. Order now.

$5.88 per Doz.

Blick - Williams Co.
Indianapolis, Ind.

"ELECTRA" PURE COPPER LIGHTNING RODS AND FIXTURES



NOTHING BETTER PRICES RIGHT WRITE US

To convince you we mean what we say, let us ship you an outfit upon approval. If you don't like it, you may return it to us at our expense

ELECTRA LIGHTNING ROD CO., 220-240 Market Street, CRESCO, IOWA

W. F. GUENTHER & SONS, Owensboro, Ky., write:

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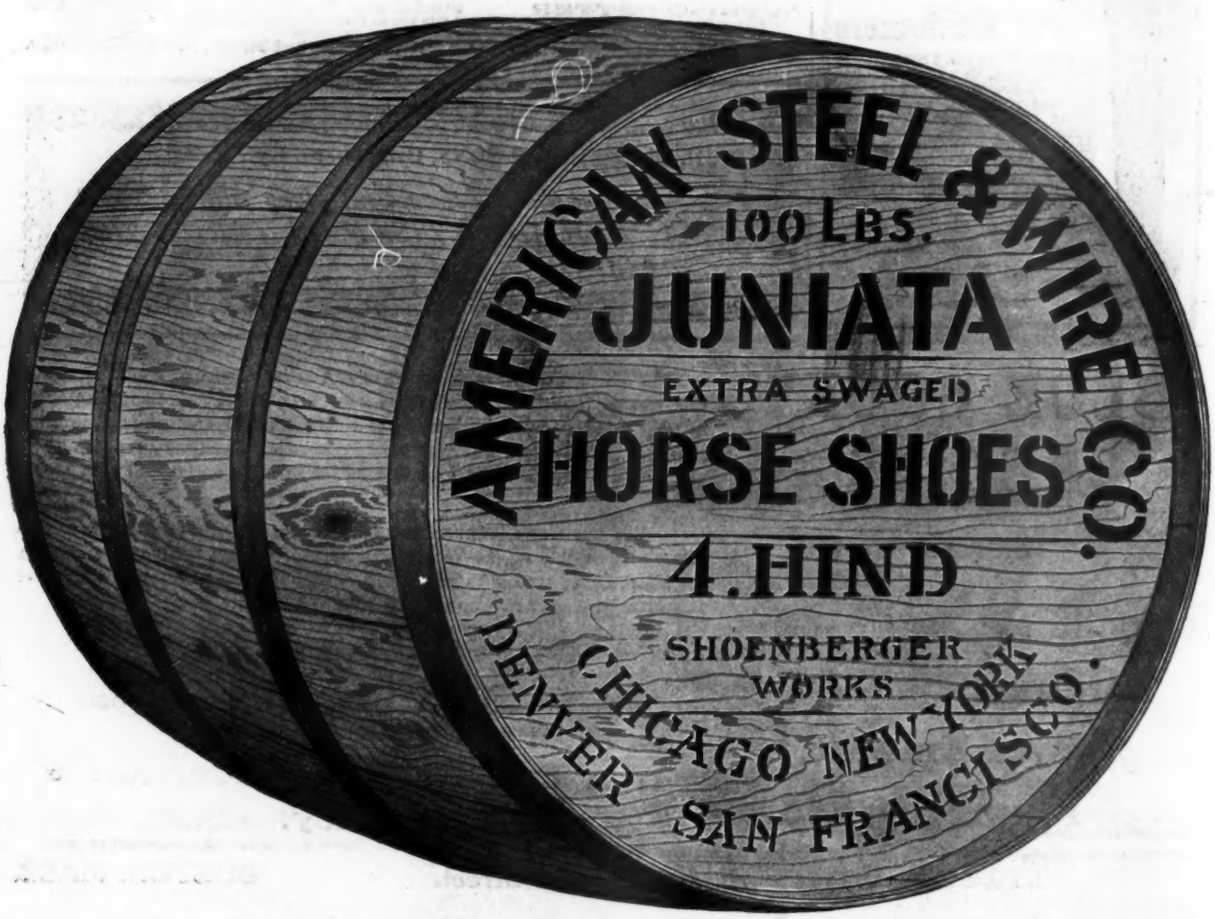
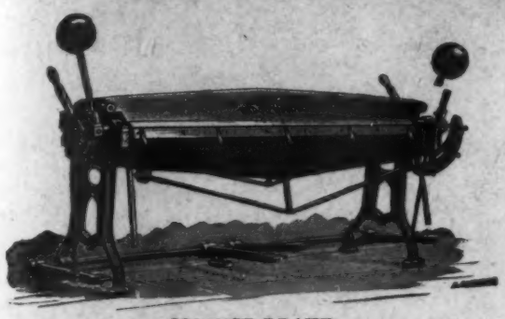
The experience of forty-five years of progressive manufacture makes Juniata horse and mule shoes perfect in shape, finish and quality of metal.

The true worth of the Juniata shoe begins at our mines and continues through our blast furnaces where the different ores are amalgamated. In our own melting processes the character of the metal is established, and from thence through our rolling mills is given the final and unchangeable quality.

Then comes the cutting, shaping, creasing and punching, to do which our old Shoenberger mill in Pittsburg is equipped with every known modern appliance and facility, superintended and manned by men who have spent their lives in becoming masters, each in his particular line.

We offer the Juniata shoe as the product of the greatest mines, steel producing plants and fabricating mills in the world; and with these good facilities and the old and skilled employes back of them, is maintained the highest standard of excellence possible for human ingenuity to produce.





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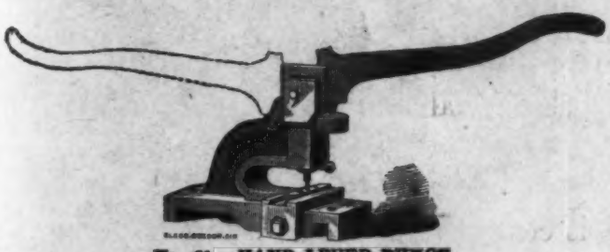
No. 59. HAND LEVER SHEARS
Will cut No. 16 Gauge material, a swath of 3¼-inch.
Weight, 20 pounds.



No. 61. HAND LEVER PUNCH
Will punch 3/16-inch holes in ⅛-inch iron.

The J. M. Robinson Mfg. Co.
3282 to 3288 Spring Grove Avenue
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As the wind is to the sails, so is advertising to the sales.	An ad in THE AMERICAN ARTISAN will bring sales.

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They are made from Best Materials Obtainable

EXTRA HEAVY

GIVE LARGE WHITE LIGHT

Heavy Coil Spring in Canopy Holds Globe Steady and Prevents Rattling

OIL FOUNTS AIR-TIGHT; OIL-TIGHT

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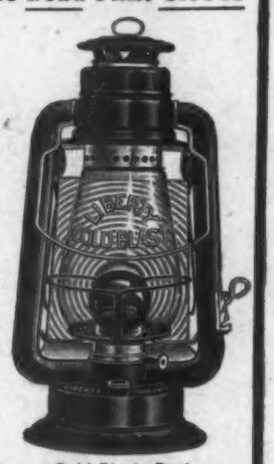

Cold Blast—Dash
Heavy Tin—Blue—Japanned

See our Salesmen or write us for Prices. Address DIVISION 5

SIMMONS HARDWARE COMPANY, INCORPORATED **ST. LOUIS, MO.**

THE IMPROVED ONE-PIECE MITER

This miter is made absolutely correct, true to shape, size, and bead, and the easiest connecting slip joint. Will save your time and temper. In case your supply house cannot furnish them, send your order direct to the

J. E. WHITACRE MFG. CO.
ROCKFORD, ILL.
Manufacturers of Sheet Metal Specialties.

"The 'GLOBE' is built on honor and sold on merit"

Patented and Trade-Mark Reg: U.S. Pat. Off.

The "GLOBE" Ventilator

in COPPER, GALVANIZED IRON and with Glass Tops for Skylight purposes.

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For Perfectly Ventilating Schools, Churches, Halls, Mills, Factory and Audience Rooms of Every Character

SMOKY CHIMNEYS CURED

"GLOBE VENTILATED RIDGING"

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We have installed Machines for decorating Cans and would be pleased to submit estimates upon request.

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SCOTT'S EXTRA COATED

This brand combines the three essentials to insure durability, viz: HAMMERED OPEN HEARTH BASE—HEAVIEST AND RICHEST COATING and PROPER METHODS OF MANUFACTURE

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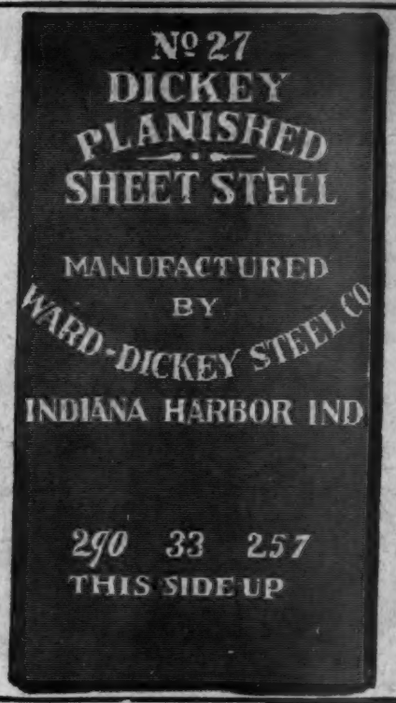
"FOLLANSBEE BANFIELD PROCESS" ROOFING TIN, Guaranteed to last not less than 15 years



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We make the kind that is neat and strong and won't get out of shape.

Nicely japanned. Latch holds lid down close and tight. Nice goods.

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All Styles and Sizes

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